PROPOSED CONDITIONS for ECan CONSENTS

1. Land Uses

CRC061769 To excavate land to depths exceeding five metres, or deeper than the highest

groundwater level at the site, and to deposit material into excavated land for the purposes of constructing the dam and reservoir. A consent with a duration of 35

years is sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

1. This consent shall be subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.

2. Works shall be confined to the areas shown on the accompanying plan CRC061845.

CRC061814 To excavate land to a depth exceeding five metres, or deeper than the highest groundwater level at the site, and to deposit material into excavated land for the purposes of constructing an Inlet Canal, Headrace Canal and Water Distribution Race Network, along and adjacent to the routes identified in Schedules A.2 - A.4. A consent with a duration of 35 years is sought.

Locations: Inlet Canal & Tunnel; Headrace; Water Distribution Race Network

Lapse date if not given effect to: 31 July 2016

- 1. This consent shall be subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. Works shall be confined to the areas shown on the accompanying plan CRC061845.
- 3. The material deposited shall comprise only:
 - (a) inert materials, being rock, stones, gravel, sand, silt, clay or soil, provided these are uncontaminated with any hazardous substance; or
 - (b) concrete or cured asphalt.
- 4. The volume of vegetative material in any ten cubic metres of material deposited shall not exceed five percent.

5. A management plan shall be prepared in accordance with Section 8.1 and Appendix B of "A guide to the Management of Cleanfills", Ministry for the Environment, January 2002.

CRC061817 To excavate and disturb land, deposit material, and remove and plant plants and vegetation, in the riparian margins of the Waianiwaniwa River associated with construction of the dam and reservoir. A consent with a duration of 35 years is sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

1. This consent shall be subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.

CRC061820 To excavate and disturb land, deposit material, and remove and plant vegetation associated with any construction, operational or maintenance activity relating to the Headrace, Inlet Canal, and Water Distribution Race Network, in the riparian margins of the surface waterbodies listed in Schedules B.1 - B.4. A consent with a duration of 35 years is sought.

Locations: Waianiwaniwa dam site; Inlet Canal to the Waianiwaniwa Reservoir; Headrace Canal; Water Distribution Race Network

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

This consent shall be subject to the conditions listed in Schedule 1: General 1. Conditions, and Schedule 2: Administrative Conditions.

CRC061822 To excavate and disturb land, deposit material and remove and plant plants and vegetation, in the riparian margin of the Rakaia River, associated with the construction and maintenance of the Rakaia water intake system. A consent with a duration of 35 years is sought.

Locations: Rakaia River Intake and Headworks

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

1. This consent shall be subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.

CRC061842 To excavate and disturb land, deposit material and remove and plant plants and vegetation, in the riparian margin of the Waimakariri River, associated with any construction, operational or maintenance activities in the area of the upper Waimakariri water intake system. A consent with a duration of 35 years is sought.

Locations: Upper Waimakariri River Intake and Headworks

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

1. This consent shall be subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.

CRC061843 To excavate and disturb land, deposit material and remove and plant plants and vegetation, in the riparian margin of the Waimakariri River, associated with any construction, operational or maintenance activities in the area of the lower Waimakariri water intake system. A consent with a duration of 35 years is sought.

Locations: Lower Waimakariri River (Gorge Bridge) Intake and Headworks

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

1. This consent shall be subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.

CRC061953 To excavate and disturb land, deposit material, and remove and plant vegetation, in the riparian margins of the Waianiwaniwa River and reservoir, associated with the use and maintenance of the dam, reservoir, and related infrastructure. A consent with a duration of 35 years is sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

1. This consent shall be subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.

CRC061954 To excavate and disturb land, deposit material, and remove and plant vegetation, associated with any operational or maintenance activity relating to the Inlet Canal, Headrace Canal, and Water Distribution Race Network in the riparian margins of the surface waterbodies identified in Schedules B.1 to B.4. A consent with a duration of 35 years is sought.

Locations: Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri, Waianiwaniwa Rivers; tributaries of Waimakariri and Rakaia Rivers

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

1. This consent shall be subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.

2. **Works in the Beds and Margins of Watercourses**

CRC061845 To erect, use and maintain the dam, in, on, under and over the bed of the Waianiwaniwa River and to construct and maintain a tunnel portal in, on, under and over the bed of the Waianiwaniwa River. A consent with a duration of 35 years is sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

Lapse date if not given effect to: 31 July 2016

- 1. The dam shall be located at or about map reference NZMS 260 L35: 274-478, and shall not rise above a Reduced Level of 283 metres with respect to the Lyttelton Datum (1937).
- 2. The design, construction and operation of the dam shall be in general accordance with the principles as presented in evidence to the hearing and as contained in the technical documents provided to the Canterbury Regional Council in support of this application or as a requirement of a condition of this consent.

- The consent holder shall inform the Canterbury Regional Council one month in 3. advance of the intended commencement of construction activities.
- 4. The works referred to in Condition (2) above shall be implemented under the supervision of persons with appropriate experience in the supervision of civil engineering construction works.
- 5. The quality of the construction materials shall be proved as part of the dam design process or the design of any subsequent works. The records shall form part of the dam design documentation or the design documentation for any subsequent works.
- 6. The consent holder shall provide a certificate, signed by a chartered engineer, to the Canterbury Regional Council stating that the dam or any subsequent works on the dam has been designed in accordance with accepted civil engineering practice and is such as to meet the conditions of this consent.
- 7. On completion of dam construction or any subsequent works the consent holder shall supply a construction certificate, signed by a chartered engineer experienced in dam construction retained by the consent holder, to the Canterbury Regional Council stating that the dam and associated works have been constructed in accordance with the design referred to in Conditions (5) and (6) above.
- 8. The consent holder shall ensure that erosion control measures are in place prior to the exercise of this consent and that all practicable steps are taken to prevent contamination of natural run-off by suspended solids during the construction period.
- 9. The consent holder shall forward a copy of the Certificate of Practical Completion together with a copy of the final 'as built' plans for any works undertaken to the Canterbury Regional Council.
- 10. The consent holder shall have particular regard to avoiding the stranding of fish in pools or river braids.
- 11. The consent holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent and for any erosion control works that become necessary as a consequence of the exercise of this consent.
- If, following a major flood, any auxiliary spillway requires reinstatement such reinstatement shall be carried out under Conditions (1) through (11) of this consent. There shall be no excavation of material to be used for reinstatement from channels containing flowing water.
- 13. A dam safety surveillance and monitoring plan shall be prepared and submitted to Canterbury Regional Council one month prior to the commencement of the filling of the Waianiwaniwa Reservoir. This plan shall follow the guidelines set out in Appendix E of the New Zealand Dam Safety Guidelines, produced by the New

Zealand Society on Large Dams, dated November 2000, as appended to these conditions, and in addition shall incorporate the following elements:

- (a) continuous telemetred measurement of the turbidity and rate of the combined discharge from the internal drainage system;
- (b) a weekly visual inspection of the dam;
- (c) weekly monitoring of the rate of discharge from each individual drain and the piezometric pressure within the dam;
- (d) a weekly review of the internal drainage flow data by a suitably qualified and competent dam engineer, with immediate review capability if alert levels are exceeded;
- A dam safety surveillance and monitoring report prepared by the dam engineer that 14. includes the following:
 - (a) confirmation that the monitoring and review programme has been followed;
 - (b) analysis and interpretation of the monitoring data, in particular the adverse trends, warnings or observation of relevance to dam safety; and
 - (c) confirmation that the dam performance is within acceptable limits as set out in Condition (15) and the report in Condition 14(a) above shall be prepared at least every two months, certified by the dam engineer and submitted to Canterbury Regional Council within the first five working days of the month following preparation of the report.
- 15. The surveillance and monitoring plan referred to in Condition (14) must identify alert levels for key performance indicators and precautionary actions to be taken if alert levels are reached or exceeded. The key performance indicators must include:
 - (a) the rate of discharge of total internal drainage flow exceeding historic maxima for the corresponding lake level;
 - (b) any apparent indication of internal erosion of the dam;
 - (c) the turbidity or rate of discharge from the internal drainage increasing by more that 10 percent over historic maxima for a continuous period of seven days; and
 - (d) the level of the lake exceeding the specified maximum operating level at any time.
- 16. A dam safety surveillance report covering the previous year to 31 March and prepared by a suitably qualified and chartered professional engineer shall be prepared and submitted to Canterbury Regional Council by the last working day in April each year. The report shall be accompanied by a certificate from the consent holder that in its

opinion and following due inquiries it is satisfied that the report is properly issued. Where the consent holder is a limited liability company, the certificate shall be signed by the directors of the company. The report shall include the following:

- (a) results of a physical inspection of the dam pursuant to Condition 7(b) undertaken within the previous three months;
- (b) review of monitoring data obtained in exercising Condition 14 for the year, and a comparison with data from previous years;
- (c) details of any mitigating actions taken or incidents of significance to dam safety in the year;
- (d) review of the performance of the dam with respect to safety, and confirmation that the dam is operating within acceptable limits and
- (e) any recommendations of relevance to dam safety.
- (a) An Emergency Action Plan shall be prepared in accordance with Appendix F of 17. the New Zealand Dam Safety Guidelines produced by the New Zealand Society on Large Dams, dated November 2000, appended to these consents, and shall include an inundation map for potential dam break scenarios. The Plan shall be maintained in a current state at all times such that it is accurate as to personnel and procedures.
 - (b) The Plan, and any subsequent changes to the Plan, shall be prepared in consultation with Canterbury Regional Council, and Selwyn District Council.
 - (c) The Plan shall be submitted to Canterbury Regional Council one month prior to the commencement of the filling of the Waianiwaniwa Reservoir.
- 18. (a) A review of the safety of the dam shall be undertaken by a Safety Review Team in accordance with Appendix G and all other relevant sections of the New Zealand Dam Safety Guidelines, produced by the New Zealand Society on Large Dams, dated November 2000 and appended to these conditions, at least every five years and as soon as practicable following an unusual event such as a major flood or major earthquake. A "major flood" is a flood causing the loss of the dam's spillway, and a "major earthquake" is an earthquake producing an estimated intensity at the dam of IX or greater on the Modified Mercalli scale.
 - (b) A report of the safety review shall be prepared and provided to the Canterbury Regional Council within five working days of the report becoming available to the consent holder.
 - (c) Within one year of the issuance of the report, the Consent Holders shall provide the Canterbury Regional Council with a report:

- (i) stating how the recommendations in the report of the safety review have been addressed;
- (ii) accompanied by a certificate by a chartered engineer that all recommendations contained in the safety review have been addressed; and
- (iii) Signed by the company's directors where the consent holder is a limited liability company.
- 19. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061846

To place, operate, maintain and repair Inlet Canal, Headrace Canal, and Water Distribution Race Network Structures, including siphons, pipes, and erosion protection structures, and associated bed excavation and disturbance, in, on, under, or over the beds of the surface waterbodies listed in Schedules B.1 - B.4. A consent with a duration of 35 years is sought.

Locations:

Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri, Waianiwaniwa Rivers; tributaries of Waimakariri and Rakaia Rivers

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. All practicable steps shall be undertaken to ensure that the works do not deflect floodwaters into the berm.

CRC061847

To erect, and maintain discharge structures and erosion protection stuctures and carry out associated bed excavation and disturbance, in, on, under, and over the bed of the surface waterbodies listed in Schedules C.1 - C.4 above. The structures and works will be associated with the construction and maintenance of the inlet Inlet Canal, Headrace Canal, and Water Distribution Race Network. A consent with a duration of 35 years is sought.

Locations:

Main stem and wetlands adjacent to Rakaia, Waimakariri, Waianiwaniwa, Selwyn/Waikirikiri, Hawkins, Hororata Rivers

Lapse date if not given effect to: 31 July 2016

- 1. This consent is subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- All practicable steps shall be undertaken to ensure that the works do not deflect 2. floodwaters into the berm.

CRC061863 To place structures in the bed of the Rakaia River and to excavate, disturb and deposit bed material, remove plants, and plant plants vegetation to facilitate the construction, operation and maintenance of the Rakaia water intake system. A consent with a duration of 35 years is sought.

Locations: Rakaia River Intake and Headworks area

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. Works to disturb the bed of the Rakaia River shall only be undertaken at or about map reference NZMS 260 K36: 071-391.
- 3. Works shall be confined to the area shown on the accompanying plan CRC061863
- 4. Works shall be limited to:
 - (a) Those which are necessary to erect, construct and maintain the intake structure required to facilitate the taking of water authorised by resource consent CRC061940.
 - Removal of debris, removal or trimming trees within the footprint of the intake (b) structure and associated facilities.

CRC061866 To place structures in the bed of the Waimakariri River and to excavate, disturb and deposit bed material, remove and plants, and plant plants vegetation to facilitate the construction, operation and maintenance of the upper Waimakariri water intake system. A consent with a duration of 35 years is sought.

Locations: Upper Waimakariri River Intake and Headworks

Lapse date if not given effect to: 31 July 2016

- 1. This consent is subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. Works to disturb the bed of the Waimakariri River shall only be undertaken at or about map reference NZMS 260 L35: 252-678.
- 3. Works shall be confined to the area shown on the accompanying plan CRC061866
- 4 Works shall be limited to:
 - (a) That which are necessary to erect and construct the intake structure required to facilitate the flow of water to the irrigation intake authorised by resource consent CRC061941.
 - Removal of debris, removal or trimming trees within the footprint of the intake (b) structure and associated facilities.

CRC061867

To place structures in the bed of the Waimakariri River and to excavate, disturb and deposit bed material, remove plants, and plant plants vegetation to facilitate the construction, operation and maintenance of the lower Waimakariri water intake system. A consent with a duration of 35 years is sought.

Locations: Lower Waimakariri River Intake and Headworks.

Lapse date if not given effect to: 31 July 2016

- 1. This consent is subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. Works to disturb the bed of the Waimakariri River shall only be undertaken at or about map reference NZMS 260 L35: 252-678.
- Works shall be confined to the area shown on the accompanying plan CRC061867 3.
- Works shall be limited to: 4.
 - That which are necessary to facilitate the flow of water authorised by resource (a) consent CRC CRC061941 to the irrigation intake.
 - Removal of debris, removal or trimming trees within the alignment of the (b) diversion or intake channel.
- 5. Any gravel excavated during the disturbance of the bed of the Waimakariri River as part of the works authorised by this consent must be deposited on, or near to, the excavation site in piles not exceeding 1.5 metres in height.

6. Any banks formed must be no higher than 2.5 metres above the water level at the time of construction.

Dam and Divert 3.

CRC061939 To dam water in the Waianiwaniwa River for the purpose of creating the reservoir. A consent with a duration of 35 years is sought.

Location: Waianiwaniwa River Valley

Lapse if not given effect to: 31 July 2016

- 1 The lake shall have a maximum operational level of 280 metres and a minimum operating level of 246 metres, both levels expressed in terms of the Lyttelton Datum (1937).
- 2 The consent holder shall install and maintain a continuous flow recorder site on the inlet canal from the upper Waimakariri River intake and thus continuously record the flow in the canal. Full access to the flow records obtained from this site shall be provided to the Canterbury Regional Council.
- 3 The consent holder shall devise and carry out a monitoring programme which measures and reports on the following:
 - Movement or deformation of the dam and water pressures within the dam; (a)
 - (b) Seismic accelerations at the dam;
 - Drainage and seepage from the dam; (c)
 - Daily lake levels; (d)
 - Weed growth and control within the lake and on the lake margins; (e)
 - (f) The incidence of dust nuisance associated with the lake margins.
- 4 The consent holder shall monitor at two monthly intervals (during a period of settled weather) the quality of water in Waianiwaniwa Reservoir adjacent to the dam; and the water discharged to the headrace canal for the following determinands:
 - (a) Dissolved Oxygen
 - (b) Temperature

- (c) Turbidity
- (d) **Electrical Conductivity**
- (e) Total Nitrogen
- (f) **Total Phosphorus**
- (g) **Total Organic Carbon**
- (h) Chlorophyll A

All methods of sampling, laboratory procedures, and analysis shall be under the supervision of or undertaken by an independently accredited laboratory. Results of the analysis shall be provided to the Canterbury Regional Council by 31 March annually or when requested.

- 5 The consent holder shall lodge a copy of the proposed monitoring programme required under Condition (4) with the Canterbury Regional Council before filling of the lake commences.
- 6 The consent holder shall forward to the Canterbury Regional Council by March 31 each year a report containing the results obtained under the sampling, monitoring and reporting programme of Condition (4) of this consent.
- 7 This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061767

To dam water and to divert water within the Waianiwaniwa River during construction of the dam and reservoir. A consent with a duration of 35 years is sought.

Location:

Waianiwaniwa River Valley

Lapse if not given effect to: 31 July 2016

- 3. This consent is subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 4. The diversion shall not obstruct or alter the passage of water in a manner that causes:
 - (a) Any increase in the risk or potential for flooding of surrounding lands;
 - Any destabilising of lawfully established flood control structures or flood control structures or any other lawfully established structures within the beds of rivers;

Any increase in erosion of river beds or banks. (c)

CRC061768

To dam and divert water during construction of the Headrace and Water Distribution Race Network, including for the purposes of constructing siphons, pipes, and erosion protection structures or works, in the surface waterbodies identified in Schedules B.2 - B.4. A consent with a duration of 35 years is sought.

Location:

Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri, Waianiwaniwa Rivers: tributaries of Waimakariri and Rakaia Rivers

Lapse if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The diversion shall not obstruct or alter the passage of water in a manner that causes:
 - Any increase in the risk or potential for flooding of surrounding lands; (a)
 - (b) Any destabilising of lawfully established flood control structures or flood control structures or any other lawfully established structures within the beds of rivers;
 - Any increase in erosion of river beds or banks. (c)

CRC061940

To divert water within the Rakaia River towards the Rakaia water intake system to enable the taking of water from the Rakaia River for irrigation and ancillary purposes, and for sediment sluicing and fish pass purposes within the Rakaia water intake system and then to divert water through the headrace canal and distribution network as described in schedules A3 and A4, which includes water being diverted within the headrace canal and distribution network both above and below ground level. A consent with a duration of 35 years is sought.

Location: Rakaia River Intake and Headworks

Lapse if not given effect to: 31 July 2016

- 1. The diversion shall not prevent the passage of fish, or cause the stranding of fish in pools or channels
- 2. The diversion shall not obstruct or alter the passage of water in a manner that causes:

- Any increase in the risk or potential for flooding of surrounding lands; (a)
- (b) Any destabilising of lawfully established flood control structures or flood control structures or any other lawfully established structures within the beds of rivers;
- Any increase in erosion of river beds or banks; (c)
- (d) This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061941 To divert water within the Waimakariri River towards the upper Waimakariri water intake system to enable the taking of water for irrigation and ancillary purposes, and for sediment sluicing and fish passes within the upper Waimakariri water intake system and then to divert water through the headrace canal and distribution network as described in schedules A2 to A4, which includes water being diverted within the headrace canal and distribution network both above and below ground level. A consent with a duration of 35 years is sought.

Upper Waimakariri River Intake and Headworks Location:

Lapse if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. The diversion shall not prevent the passage of fish, or cause the stranding of fish in pools or channels
- 2. The diversion shall not obstruct or alter the passage of water in a manner that causes:
 - Any increase in the risk or potential for flooding of surrounding lands; (a)
 - (b) Any destabilising of lawfully established flood control structures or flood control structures or any other lawfully established structures within the beds of rivers;
 - Any increase in erosion of river beds or banks. (c)
 - (d) This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

To divert water in the Waimakariri River towards the lower Waimakariri water CRC061943 intake system to enable the taking of water for irrigation and ancillary purposes, and for sediment sluicing and fish passes within the lower Waimakariri water

intake system and then to divert water through the headrace canal and distribution network as described in schedules A3 and A4, which includes water being diverted within the headrace canal and distribution network both above and below ground level. A consent with a duration of 35 years is sought.

Location: Lower Waimakariri River (Gorge Bridge) Intake and Headworks

Lapse if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. The diversion shall not prevent the passage of fish, or cause the stranding of fish in pools or channels
- 2. The diversion shall not obstruct or alter the passage of water in a manner that causes:
 - (a) Any increase in the risk or potential for flooding of surrounding lands;
 - (b) Any destabilising of lawfully established flood control structures or flood control structures or any other lawfully established structures within the beds of rivers;
 - (c) Any increase in erosion of river beds or banks.
 - (d) This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061767 To dam water and to divert water within the Waianiwaniwa River during construction of the dam and reservoir. A consent with a duration of 35 years is sought.

Location: Waianiwaniwa River Valley, Dam and Storage Reservoir

Lapse if not given effect to: 31 July 2016

- 1. This consent is subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The diversion shall not obstruct or alter the passage of water in a manner that causes:
 - (a) Any increase in the risk or potential for flooding of surrounding lands;
 - (b) Any destabilising of lawfully established flood control structures or flood control structures or any other lawfully established structures within the beds of rivers;

Any increase in erosion of river beds or banks. (c)

CRC061768 To dam and divert water during construction of the Headrace and Water

> Distribution Race Network, including for the purposes of constructing siphons, pipes, and erosion protection structures or works, in the surface waterbodies identified in Schedules B.2 - B.4. A consent with a duration of 35 years is sought.

Location: Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri,

Waianiwaniwa Rivers: tributaries of Waimakariri and Rakaia Rivers

Lapse if not given effect to: 31 July 2016

Duration: 20 years

Subject to the following conditions:

1. This consent is subject to the conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.

- 2. The diversion shall not obstruct or alter the passage of water in a manner that causes:
 - (a) Any increase in the risk or potential for flooding of surrounding lands;
 - (b) Any destabilising of lawfully established flood control structures or flood control structures or any other lawfully established structures within the beds of rivers;
 - (c) Any increase in erosion of river beds or banks.

4. Take and Use Water

CRC061925 To take water for dewatering purposes during construction of the Inlet Canal,

> Headrace Canal, and Water Distribution Race Network, including for the purposes of constructing siphons, pipes, and erosion protection structures/works, in the surface waterbodies identified in Schedules B.1 - B.4. A consent with a

duration of 35 years is sought.

Location: Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri,

Waianiwaniwa Rivers: tributaries of Waimakariri and Rakaia Rivers

Lapse if not given effect to: 31 July 2016

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. Water shall only be taken, diverted and used in association with the dewatering required to facilitate construction of the Inlet Canal, Headrace Canal, and Water Distribution Race Network (including for the purposes of constructing siphons, pipes, and erosion protection structures/works)
- 3. Dewatering water shall not cause adverse effects on surrounding property or infrastructure.
- 4. The consent holder shall submit to the Canterbury Regional Council RMA Compliance and Enforcement Manager at least one month prior to the exercise of this consent, a Dewatering Management Plan outlining the construction and management practices and procedures to be adopted in order that compliance with the conditions of this consent can be achieved and the effects of the dewatering activities are minimised to the greatest extent practicable. The plan shall include, but not necessarily be limited to:
 - (a) The extent of the construction activities in relation to the areas where dewatering will be required.
 - (b) The types of dewatering methods to be adopted and details of where water will be directed and disposed of.
 - (c) A construction management programme including timetable, sequence of events and duration.
 - (d) The mitigation measures to be adopted to minimise the effects of dewatering on surrounding property and infrastructure.
 - (e) Contact details for the person in charge of the site works.
- 5. The consent holder may at any time, submit to the Canterbury Regional Council, an amended Dewatering Management Plan for the purposes of improving the efficiency and or quality of the dewatering or to remove or reduce an adverse environmental effect.

CRC061927 To take surface water and groundwater for dewatering purposes during construction of the dam and reservoir. A consent with a duration of 35 years is sought.

Location: Waianiwaniwa River Valley, Dam and Storage Reservoir

Lapse if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. Water shall only be taken, diverted and used in association with the dewatering required to facilitate construction of the dam and storage lake as shown on plan CRC061927.
- 3. Dewatering water shall not cause adverse effects on surrounding property or infrastructure.
- 4. The consent holder shall submit to the Canterbury Regional Council RMA Compliance and Enforcement Manager at least one month prior to the exercise of this consent, a Dewatering Management Plan outlining the construction and management practices and procedures to be adopted in order that compliance with the conditions of this consent can be achieved and the effects of the dewatering activities are minimised to the greatest extent practicable. The plan shall include, but not necessarily be limited to:
 - The extent of the construction activities in relation to the areas where (a) dewatering will be required.
 - The types of dewatering methods to be adopted and details of where water will (b) be directed and disposed of.
 - (c) A construction management programme including timetable, sequence of events and duration.
 - (d) The mitigation measures to be adopted to minimise the effects of dewatering on surrounding property and infrastructure.
 - (e) Contact details for the person in charge of the site works.
- 5. The consent holder may at any time, submit to the Canterbury Regional Council, an amended Dewatering Management Plan for the purposes of improving the efficiency and or quality of the dewatering or to remove or reduce an adverse environmental effect.

CRC061930 To take water from the Waianiwaniwa River, for use during the construction of the dam, reservoir and tunnel portal, including for concrete batching plant purposes, the control of moisture in compacted soil, and for the control of dust. A consent with a duration of 35 years is sought.

Location: Waianiwaniwa River Valley, Dam and Storage Reservoir

Lapse if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. Water shall only be taken and used to facilitate construction of the dam, ancillary structures and storage lake as shown on plan CRC061930.

CRC061972 To take and use water from the Waimakariri River at a maximum rate of 40 cubic metres per second via the upper Waimakariri water intake system and the lower Waimakariri water intake system, for the purposes of irrigation of up to 60,000 hectares of land within the Scheme Area, for water storage, and for ancillary purposes associated with the operation of the Central Plains Water Enhancement Scheme. A consent with a duration of 35 years is sought.

Location: Waimakariri River Upper and Lower Intakes

Lapse if not given effect to: 31 July 2016

Subject to the following conditions:

Subject to the following conditions:

- 1. The maximum total combined take from the Waimakariri River, at the upper and lower intake sites shall not exceed 40 cubic metres per second.
- 2. Subject to Condition 1, whenever the flow in the Waimakariri River, as estimated by the Canterbury Regional Council from measurements at the Old Highway Bridge, at or about map reference NZMS 260 M35: 818-547, is
 - (a) (i) equal to or greater than the sum of 41 cubic metres per second plus the total abstractions authorised by permits which come within the category of "A" permits as defined by the Waimakariri River Regional Plan; or
 - (ii) greater than 41 cubic metres per second and less than 63 cubic metres per second and all water permit holders who are subject to the same minimum flow restriction of 41 cubic metres per second, are adhering to a water sharing regime that restricts the total rate of abstraction from the Waimakariri River whenever the flow is at or above 41 cubic metres per second:

then the rate of abstraction shall not exceed [??5??] cubic metres per second.

- greater than 41 cubic metres per second and less than 63 cubic metres per (b) second, except where (a) (ii) or (iii) applies, the maximum rate of take during the next 24 hours shall be equal to the rate shown on the vertical axis on the attached graphs for irrigation, that corresponds to that flow on the horizontal axis, by reference to the diagonal line.
- less than or equal to 41 cubic metres per second, the taking of water for (c) irrigation shall cease.
- 3. All necessary measures shall be undertaken to prevent fish entering the intake, including the installation of a fish screen.
- 4. Fish screens shall be operated and maintained on all intakes within the Central Plains Water Enhancement Network, to ensure that fish are prevented from entering these intakes.
- 5. (a) Within six months of the commencement of this consent, the consent holder shall install a water flow measuring device that has an International accreditation, New Zealand or equivalent calibration endorsement, to continously measure the taking of water in terms of this permit to within an accuracy of 10 percent.
 - (b) The measuring device shall, as far as is practicable, be installed at a site likely to retain a stable rating. The measuring device shall be installed in accordance with established standards (National Instituteof Water and Atmospheric research (NIWA) manual / standard) by competent / qualified person.
 - (c) A site inspection of the site of the measuring device shall be carried out at least once every month to determine the need for re-gauging the site.
 - (d) The measuring site shall be gauged at least every three months and at any time, when determined by a site inspection.
 - Gaugings and site inspections shall be carried out in accordance with the (e) following manuals: Hydrologists Field Manual (NIWA 1991), Telemetry Manual (NIWA 1994), and Procedure for Rating a Flow Station (NIWA 1993) or any replacement publication.
 - (f) The rates and times of abstraction shall be recorded by electronic means, at not greater than fifteen minute intervals, in a tamper-proof recording device such as a data-logger, kept for that purpose. The recorded data shall not be changed or deleted by any person, until after twelve months have passed since the date of recording.
 - (g) The measuring and recording device shall be available for inspection at all times by the Canterbury Regional Council.

- All data from the recording device described in clause (a) shall be provided to (h) the Canterbury Regional Council on request, and shall be accessible and available for downloading at all times by the Canterbury Regional Council.
- (i) Within six months of the commencement of this consent, and at five-yearly intervals thereafter, and at any other time when requested by Canterbury Regional Council, the consent holder shall provide a certificate to the Canterbury Regional Council signed by a suitably qualified person certifying the accuracy of the measuring and recording devices installed in accordance with clauses (a) and (b), and also certifying that data can be readily accessed.
- 6. The consent holder shall ensure that appropriate agreements are put in place with all users of water from the Central Plains Water Enhancement Scheme to:
 - Ensure that the volume of water applied does not exceed that required for the (a) soil to reach field capacity; and
 - (b) Ensure that there is no surface run-off from irrigation; and
 - Avoid leakage from pipes and structures forming part of the reticulation system (c) associated with the abstraction; and
 - Avoid the application of abstracted water onto non-productive land such as (d) impermeable surfaces and river or stream riparian strips.
- 7. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061973 To take and use water from the Rakaia River at a maximum rate of 40 cubic metres per second via the Rakaia water intake system, for the purposes of irrigating up to 60,000 hectares of land within the Scheme Area, for water storage, and for ancillary purposes associated with the operation of the Central Plains Water Enhancement Scheme. A consent with a duration of 35 years is sought.

Location: Rakaia River Intake

Lapse if not given effect to: 31 July 2016

Subject to the following conditions:

The rate at which water is taken from the Rakaia River, at or about map reference NZMS 260 K36:050-393, and at or about map reference NZMS 260 K36:072-391 shall not exceed a combined take of 40 cubic metres per second.

- 2. The take permitted by this consent shall not be exercised until resource consents have been obtained for the construction and use of the intakes, diversion canals, settling basins, storage basins and conveyance canals and for the USE and discharge of the water necessary for the operation of either of respective schemes to the north or south of the Rakaia River.
- 3. Except as provided for in condition 5, whenever the mean flow for the 24 hour period ending at noon on any one day (expressed in cubic metres per second) in the Rakaia River, as estimated by Environment Canterbury from measurements at either the gorge recorder site (at or about map reference NZMS 260 K35:015-424) or the recorder site at Fighting Hill (at or about map reference NZMS 260 K35:997-437), falls below the following flows (Y m³/s), the taking of water in terms of this permit shall cease:

Month:	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flow: (Y m ³ /s)	184	168	165	157	155	156	151	152	150	166	189	199

Note: In the event that water in higher priority bands becomes available for allocation to other water users, then the minimum flows in this condition will require amendment to recognise the priority rights of the consent holder.

4. Except as provided for in condition 5, whenever the mean flow for the 24 hour period ending at noon on any one day (expressed as X cubic metres per second) in the Rakaia River, as estimated by Environment Canterbury from measurements at either the gorge recorder site (at or about map reference NZMS 260 K35:015-424) or the recorder site at Fighting Hill (at or about map reference NZMS 260 K35:997-437), exceeds the minimum flow Y as contained in condition 3, then the take shall not exceed Z m³/s where:

$$Z = (X-Y)/2$$
 and $Z \le 40 \text{ m}^3/\text{s}$

PROVIDED THAT whenever Environment Canterbury, in consultation with the Water Users Group representing all water users who are subject to the same minimum flow restriction, has determined upon a water sharing regime which restricts abstraction from the Rakaia River to half the flow above the minimum flows specified in Condition 3, then the taking of water in accordance with that determination shall be deemed to be in compliance with this condition.

- 5. In the event that any water allocated to another water user is not being taken, or there is water that has not been allocated within a higher priority band, the consent holder may take that water provided that the water allocation rules in the NWCO are complied with.
- 6. Fish screens shall be installed and maintained on the diversion channels and the mesh aperture size of the screen shall not exceed five millimetres.

- 7. Each fish screen shall be inspected at maximum intervals of two days for any damage causing fish to pass through the screen, or once every 24 hour period when the flow in the Rakaia River is greater than 300 cubic metres per second, as estimated by Environment Canterbury, from measurements at either the gorge recorder site (at or about map reference NZMS 260 K35:015-424) or the recorder site at Fighting Hill (at or about map reference NZMS 260 K35:997-437).
- 8. In the event that a screen is damaged such that the screen mesh aperture is greater than those specified in Condition 6, the screen shall be repaired or replaced immediately with a screen that complies with Condition 6, or the damaged screen shutdown. Any screen shut down shall not be opened again until a screen that complied with Condition 5 is fitted.
- 9. The incidence of screen shutdowns shall be recorded and reported to the North Canterbury Fish and Game council within four hours. Records of screen failure shall be forwarded to Environment Canterbury at the end of each irrigation season, or as requested.
- 10. The rate at which water is taken shall be measured to within an accuracy of 10%, and the measurement and the hours during which water is taken shall be recorded. A copy of the records shall be provided to Environment Canterbury upon request.
- A steel grill shall be placed over the inlet to the intake structure and, as far as is practicable, shall be positioned such that it minimises the probability of water users becoming pinned against it.
- Signs warning of the position of the intake structure shall be erected at points 12. upstream of the intake that are used by the public to enter the Rakaia River.
- 13. A warning sign visible from 50 metres upstream shall be erected adjacent to the intake.
- 14. All commercial users and recreational boat clubs shall, as far as is practicable, be informed in writing of the position of the intake, within one month of the start of construction of the intake.
- The lapsing provisions of section 125 of the Resource Management Act 1991 shall not apply until after the expiry of 5 years from the date of grant of all the consents necessary for the construction and use of the intakes, diversion canals, settling basins, storage basins and conveyance canals and for the USE and discharge of the water necessary for the operation of either of respective schemes to the north or south of the Rakaia River.
- Environment Canterbury may, on the last working day of June each year, serve notice of its intention to review the conditions of this consent for the purposes of dealing

with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, including any adverse effects arising from the inefficient use of water.

- Environment Canterbury may, on any of the last five working days of June 2005, 2010, 2015, 2020, 2025 and 2030, serve notice of its intention to review the conditions of this consent for the purposes of:
 - altering the rate of abstraction to correspond to the actual rate of water usage; (a)
 - amending the minimum flow restrictions in Condition 3 to reflect any changes (b) in the abstraction rate of the other abstractors from the river.

5. **Water Discharges**

CRC061870 To discharge contaminants, being principally sediment, and water to the Waianiwaniwa River, during construction of the dam, reservoir, and tunnel

portal. A consent with a duration of 35 years is sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The discharges shall only be water and contaminants (principally suspended solids) reasonably necessary to facilitate the construction of the dam, reservoir and related facilities and shall only occur within the area as shown on the accompanying plan CRC061863.
- 3. The discharge of water shall be undertaken in accordance with the management plan prepared in accordance with Condition 1 of this consent, to minimise sediment suspension and transport arising from the taking, diverting or use of water.

CRC061871 To discharge contaminants, being principally sediment, and water associated with any construction activity relating to the construction and maintenance of the Inlet Canal, Headrace Canal and Water Distribution Race Network, to water in surface waterbodies listed in Schedules B.1 - B.4. A consent with a duration of 35 years is sought.

Locations: Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri,

Waianiwaniwa Rivers; tributaries of Waimakariri and Rakaia Rivers

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.

- The discharges shall only be water and contaminants (principally suspended solids)
 reasonably necessary for the construction of the inlet canal, headrace canal, and water
 distribution race network and shall only occur within the areas shown on the
 accompanying plan CRC061871.
- 3. The discharge of water shall be undertaken in accordance with the management plan prepared in accordance with condition 1 of this consent, to minimise sediment suspension and transport arising from the taking, diverting or use of water.

CRC061873 To discharge water and contaminants, being principally sediment, to the Rakaia River from the construction, operation and maintenance of the Rakaia water intake system. A consent with a duration of 35 years is sought.

Locations: Rakaia River Intake and Headworks

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The discharges shall only be water and contaminants (principally suspended solids) reasonably necessary for the construction of the intake structures, sediment sluicing, fish pass and diversion channels intake structures, sediment sluicing, fish pass and diversion channels and shall only occur within the areas shown on the accompanying plan CRC061873.
- 3. The discharge of water shall be undertaken in accordance with the management plan prepared in accordance with Condition 1 of this consent, to minimise sediment suspension and transport arising from the taking, diverting or use of water.

CRC061875 To discharge water and contaminants, being principally sediment, to the Waimakariri River from construction, operation and maintenance activities on

the upper Waimakariri water intake system. A consent with a duration of 35 years is sought.

Locations: Upper Waimakariri River Intake and Headworks

Lapse date if not given effect to: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The discharges shall only be water and contaminants (principally suspended solids) reasonably necessary for the construction of the intake structures, sediment sluicing, fish pass and diversion channels intake structures, sediment sluicing, fish pass and diversion channels and shall only occur within the areas shown on the accompanying plan CRC061875.
- 3. The discharge of water shall be undertaken in accordance with the management plan prepared in accordance with condition 1 of this consent, to minimise sediment suspension and transport arising from the taking, diverting or use of water.

CRC061920 To discharge water and contaminants, being principally sediment, to the Waimakariri River from construction, operation and maintenance activities on the lower Waimakariri water intake system. A consent with a duration of 35 years is sought.

Locations: Lower Waimakariri River Intake and Headworks

Lapse date if not given effect to: 31 July 2016

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The discharges shall only be water and contaminants (principally suspended solids) reasonably necessary for the construction of the intake structures, sediment sluicing, fish pass and diversion channels intake structures, sediment sluicing, fish pass and diversion channels and shall only occur within the areas shown on the accompanying plan CRC061920.
- 3. The discharge of water shall be undertaken in accordance with the management plan prepared in accordance with condition 1 of this consent, to minimise sediment suspension and transport arising from the taking, diverting or use of water.

CRC061922 To discharge stormwater, which may contain contaminants, onto or into land, in circumstances where it may enter water, and to the surface water bodies identified in Schedules B1-B4?, from all construction areas associated the Central Plains Water Enhancement Scheme. A consent with a duration of 35 years is sought.

And:

CRC061924 To discharge stormwater, which may contain contaminants, from all construction areas into the Waimakariri River and the Rakaia River and the waterbodies listed in Schedules B.1 - B.4. A consent with a duration of 35 years is sought.

Locations: Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri, Waianiwaniwa Rivers; main stem and tributaries of Waimakariri and Rakaia Rivers

Lapse date if not given effect to: 31 July 2016

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The discharge of water shall be undertaken in accordance with the stormwater management plan prepared in accordance with condition 1 of this consent, to minimise sediment suspension and transport arising from the discharge of stormwater runoff.
- 3. The discharge shall be only stormwater from hardstanding and unpaved surfaces at a construction areas associated with the Central Plains Water Enhancement Scheme.
- 4. Any substance, which is a hazardous substance in terms of the Hazardous Substance and New Organisms Act (HASNO) (1996) shall be stored in a bunded or contained
- 5. A Spill Contingency Plan shall be submitted to the Canterbury Regional Council prior to the use of the system.
- 6. In the event of a spillage of fuel or any other contaminant stored, used or handled at a site, emergency response procedures shall be undertaken to prevent contaminants leaving the site. These procedures shall include but not be limited to:
 - (a) Informing the Canterbury Regional Council of any significant contaminant spill event at the time the event occurs; and
 - (b) Maintaining a record of any spill where contaminants enter the stormwater system. The record shall be made available to staff at the Canterbury Regional Council on request. The record shall include the following information:

- (i) The date, time and duration of the incident.
- (ii) The type, including proprietary names where appropriate, of contaminant(s) spilled.
- (iii) An estimate of the volume of contaminant(s) spilled; and
- (iv) Details of the steps taken to control and remediate the effects of any such spill event on the receiving environment.
- 7. A stormwater management plan for the stormwater treatment and disposal system shall be submitted to the Canterbury Regional Council prior to the use of the system. This plan shall set out how the system will be operated and maintained to ensure compliance with conditions of this consent. The plan shall include but not necessarily be limited to:
 - (a) Design plans of stormwater collection and discharge systems.
 - (b) Details of the activities that will occur on site.
 - (c) Any hazardous chemicals (including fuel and oils) that will be held on site and their storage requirements.
- CRC061928 To discharge water taken for dewatering purposes during construction or maintenance works to land in circumstances where it may enter water, and to water in the surface waterbodies identified in Schedules B.1 B.4. A consent with a duration of 35 years is sought.

Locations: Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri, Waianiwaniwa Rivers; tributaries of Waimakariri and Rakaia Rivers

Lapse date if not given effect to: 31 July 2016

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. Water shall only be taken, diverted and used in association with the dewatering required to facilitate the construction of the Central Plains Water Enhancement Scheme facilities described in the application documents.
- 3. Dewatering water shall not cause adverse effects on surrounding property or infrastructure.
- 4. The consent holder shall submit to the Canterbury Regional Council RMA

 Compliance and Enforcement Manager at least one month prior to the exercise of this

consent, a Dewatering Management Plan outlining the construction and management practices and procedures to be adopted in order that compliance with the conditions of this consent can be achieved and the effects of the dewatering activities are minimised to the greatest extent practicable. The plan shall include, but not necessarily be limited to:

- (a) The extent of the construction activities in relation to the areas where dewatering will be required.
- (b) The types of dewatering methods to be adopted and details of where water will be directed and disposed of.
- (c) A construction management programme including timetable, sequence of events and duration.
- (d) The mitigation measures to be adopted to minimise the effects of dewatering on surrounding property and infrastructure.
- (e) Contact details for the person in charge of the site works.
- The consent holder may at any time, submit to the Canterbury Regional Council, an amended Dewatering Management Plan for the purposes of improving the efficiency and or quality of the dewatering or to remove or reduce an adverse environmental effect.

CRC061932 To discharge water and contaminants, being principally sediment, from construction and maintenance activities associated with the tunnel to land and to water during construction in the area identified in Schedule A.2. A consent with a duration of 35 years is sought.

Locations: Inlet Canal & Tunnel; Waianiwaniwa River Valley, Dam and Storage Reservoir

Lapse date if not given effect to: 31 July 2016

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The discharges shall only be water and contaminants (principally suspended solids) reasonably necessary for the construction of the inlet canal and tunnel and shall only occur within the areas shown on the accompanying plan CRC061932.
- 3. The discharge of water shall be undertaken in accordance with the management plan prepared in accordance with condition 1 of this consent, to minimise sediment suspension and transport arising from the taking, diverting or use of water.

CRC061945

To discharge stormwater, which may contain contaminants, onto or into land, in circumstances where it may enter water, from all structures including but not limited to: Inlet Canal, Headrace Canal, Water Distribution Race Network, dam and reservoir, roads, hardstand areas and utility buildings associated with the Central Plains Water Enhancement Scheme. A consent with a duration of 35 years is sought.

Locations:

Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri, Waianiwaniwa Rivers, Waimakariri and Rakaia Rivers

Subject to the following conditions:

- 1. This consent is subject to the general conditions listed in Schedule 1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The discharge of stormwater shall be undertaken in accordance with the stormwater management plan prepared in accordance with condition 1 of this consent, to minimise sediment suspension and transport.
- 3. The discharge shall be only stormwater from hardstanding and unpaved surfaces at facilities associated with the Central Plains Water Enhancement Scheme.
- 4. A Spill Contingency Plan shall be submitted to the Canterbury Regional Council prior to the use of the system.
- 5. A stormwatwer management plan for the stormwater treatment and disposal system shall be submitted to the Canterbury Regional Council prior to the use of the system. This plan shall set out how the system will be operated and maintained to ensure compliance with conditions of this consent. The plan shall include but not necessarily be limited to:
 - (a) Design plans of stormwater collection and discharge systems.
 - (b) Details of the activities that will occur on site.
 - (c) Any hazardous chemicals (including fuel and oils) that will be held on site and their storage requirements.
 - (d) Spill contingency plan.

CRC061949

To discharge water and contaminants to land in circumstances where it may enter water, in the form of seepage from beneath the Reservoir, and along the length of the Inlet Canal, Headrace Canal, Water Distribution Race Network,

and wetlands, as listed in Schedules A1-A4 and C3-C4. A consent with a duration of 35 years is sought.

Locations: All Operational canals, races and wetlands of the Central Plains Water Enhancement

Scheme; Storage reservoir

Subject to the following conditions:

- 1. The storage and conveyance structures shall be designed and constructed to as far as practicable minimise the loss of water to ground.
- 2. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061950 To discharge surplus water and contaminants, from the headrace Headrace and water Water distribution Distribution race Race network Network to land in circumstances where it may enter groundwater, and to water at the locations listed in Schedules C.1 - C.4 above. A consent with a duration of 35 years is sought.

Locations: Main stem and wetlands adjacent to Rakaia, Waimakariri, Waianiwaniwa, Selwyn/Waikirikiri, Hawkins, Hororata Rivers

Subject to the following conditions:

- 1. The rate of flow at any discharge point shall not exceed 10 cubic metres per second.
- 2. The discharge shall not result in significant erosion of the bed or banks of any watercourse.
- 3. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions

CRC061974 To discharge water and contaminants from the headrace canal to the Waianiwaniwa River at or about map reference NZMS 260 L35: 282-540. A consent with a duration of 35 years is sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

- 1. The discharge shall occur at or about map reference NZMS 260 L35: 275-476.
- 2. The rate of flow shall not exceed the mean annual flow of the Waianiwaniwa River.

- 3. The discharge shall not result in significant erosion of the bed or banks of the Waianiwaniwa River.
- 4. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions

CRC061975 To discharge water and contaminants from the reservoir to water in the headrace canal. A consent with a duration of 35 years is sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

Subject to the following conditions:

- 1. The discharge shall occur at or about map reference NZMS 260 L35: 275-476.
- 2. The rate of flow shall not exceed 45 cubic metres per second.
- 3. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions

CRC061976 To discharge water and contaminants from the tunnel portal to land and water in the reservoir. A consent with a duration of 35 years is sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

Subject to the following conditions:

- 1. The discharge shall occur at or about map reference NZMS 260 L35: 282-539.
- 2. The rate of flow shall not exceed 40 cubic metres per second.
- 3. The discharge shall not result in significant erosion of the bed or banks of the Waianiwaniwa River or the bed or banks of the Waianiwaniwa Reservoir.
- 4. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions

CRC061977 To discharge contaminants, being principally sediment, and water to water associated with any operational or maintenance activity relating to the Inlet Canal, Headrace Canal and Water Distribution Race Network, in surface waterbodies listed in Schedules B.1 - B.4. A consent with a duration of 35 years is sought.

Locations: Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri, Waianiwaniwa Rivers; tributaries of Waimakariri and Rakaia Rivers

Subject to the following conditions:

- This consent is subject to the general conditions listed in Schedule 1: General 1. Conditions.
- 2. The discharge of water shall be undertaken in accordance with the management plan prepared in accordance with Condition 1 of this consent, to minimise sediment suspension and transport.
- 3. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions

CRC061978 To discharge surplus water and contaminants from the Headrace Canal and Water Distribution Race Network to land adjacent to, in circumstances where it may enter water and to water in the surface waterbodies identified in Schedules B.1 - B.4. A consent with a duration of 35 years is sought.

Locations: Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri, Waianiwaniwa Rivers: tributaries of Waimakariri and Rakaia Rivers.

Subject to the following conditions:

- 1. The discharge shall not cause any adverse environmental effect.
- 2. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061980 To discharge water that has been diverted, but not taken, back into the Rakaia River, via sediment sluicing, fish pass and bypass channels that form part of the Rakaia water intake system. A consent with a duration of 35 years is sought.

Locations: Rakaia River Intake and Headworks

- 1. The discharge shall not cause significant erosion of the bed or banks of any watercourse.
- 2. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061981 To discharge water that has been diverted but not taken, back into the Waimakariri River, via sediment sluicing, fish pass and diversion channels that form part of the upper Waimakariri water intake system, A consent with a duration of 35 years is sought.

Locations: Upper Waimakariri River Intake and Headworks

Subject to the following conditions:

- 1. The discharge shall not cause significant erosion of the bed or banks of any watercourse.
- 2. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061982 To discharge water that has been diverted but not taken, back into the Waimakariri River, via sediment sluicing, fish pass and diversion channels that form part of the lower Waimakariri Water Intake System. A consent with a duration of 35 years is sought.

Locations: Lower Waimakariri River (Gorge Bridge) Intake and Headworks

Subject to the following conditions:

- 1. The discharge shall not cause erosion of the bed or banks of any watercourse.
- 2. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

CRC061983 To discharge stormwater, which may contain contaminants, from all structures associated with the Central Plains Water Enhancement Scheme into a river, lake or artificial watercourse, including the Waimakariri River and Rakaia River and the waterbodies listed in Schedules B.1 - B.4 and C.1 - C.4. A consent with a duration of 35 years is sought.

Locations: Main stem and tributaries of Kowai, Hawkins, Hororata, Selwyn/Waikirikiri, Waianiwaniwa Rivers, Waimakariri and Rakaia Rivers

- This consent is subject to the general conditions listed in Schedule 1: General 1. Conditions, and Schedule 2: Administrative Conditions.
- 2. The discharge of stormwater shall be undertaken in accordance with the stormwater management plan prepared in accordance with Condition 1 of this consent, to minimise sediment suspension and transport.

- 3. The discharge shall be only stormwater from hardstanding and unpaved surfaces at facilities associated with the Central Plains Water Enhancement Scheme.
- 4. A Spill Contingency Plan shall be submitted to the Canterbury Regional Council prior to the use of the system.
- 5. A stormwater management plan for the stormwater treatment and disposal system shall be submitted to the Canterbury Regional Council prior to the use of the system. This plan shall set out how the system will be operated and maintained to ensure compliance with conditions of this consent. The plan shall include but not necessarily be limited to:
 - (a) Design plans of stormwater collection and discharge systems.
 - (b) Details of the activities that will occur on site.
 - (c) Any hazardous chemicals (including fuel and oils) that will be held on site and their storage requirements.
 - (d) Spill contingency plan.

6. Air Discharges

CRC061759 To discharge contaminants, being principally dust, to air from construction

activities associated with the construction of the dam and reservoir. A consent

with a duration of 35 years is sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

And:

CRC061762 To discharge contaminants, being principally dust, to air from construction

activities along the routes of the Inlet Canal, Headrace Canal, and Water

Distribution Race Network, including pump stations as listed in Schedule A8, and at the sites listed in Schedules A.2 - A.4. A consent with a duration of 35 years is

sought.

Locations: Inlet Canal and Tunnel from the Waimakariri River to the Waianiwaniwa Reservoir;

Headrace; and Water Distribution Race Network

And:

CRC061763 To discharge contaminants, principally dust, to air from any construction or

maintenance activity associated with the Rakaia water intake system. A consent

with a duration of 35 years is sought.

Locations: Rakaia River Intake and Headworks

And:

CRC061765

To discharge contaminants, being principally dust, to air from any construction, operational or maintenance activity associated with the upper Waimakariri water intake system and the lower Waimakariri water intake system. A consent with a duration of 35 years is sought.

Locations:

Upper Waimakariri River Intake and Headworks

Lapse Date for CRC061759, CRC061762, CRC061763, CRC061765: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the general conditions listed in Schedule1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The consent holder shall submit to the Canterbury Regional Council at least one month prior to the commencement of works, a Dust Management Plan outlining the construction practices and procedures to be adopted in order that compliance with the condition of this consent can be achieved and the effects of construction activities are minimised to the greatest extent practicable. The plan shall include, but not be limited to:
 - (a) The extent of the construction activities in relation to area, where dust could be generated.
 - (b) The types of construction methods to be adopted.
 - (c) The mitigation measures to be adopted to minimise the effects of dust beyond the boundary of the construction site.
 - (d) Contact detail for the person in charge of the site works.
- 3. The discharge shall be limited to contaminants arising from the construction, maintenance and operation of the Central Plains Water Enhancement Scheme.
- 4. All practicable measures shall be made to limit the duration and frequency that dust associated with construction, operation and maintenance activities is discharged to air.

CRC061755

To discharge contaminants to air from construction activities including welding, abrasive blasting, water blasting and painting associated with the construction of the Central Plains Water Enhancement Scheme. A consent with a duration of 35 years is sought.

Locations:

Waianiwaniwa Dam and Storage Reservoir, Waianiwaniwa Valley, Inlet Canal and Tunnel from the Waimakariri River to the Waianiwaniwa Reservoir; Headrace; and Water Distribution Race Network, Rakaia River Intake and Headworks, Upper

Waimakariri River Intake and Headworks, Lower Waimakariri River (Gorge Bridge) Intake and Headworks

Lapse Date: 31 July 2016

Subject to the following conditions:

- 1. This consent is subject to the general conditions listed in Schedule1: General Conditions, and Schedule 2: Administrative Conditions.
- 2. The discharge shall be limited to contaminants arising from construction of the Central Plains Water Enhancement Scheme.
- 3. The dispersal or deposition of particles shall not cause an objectionable or offensive effect beyond the boundary of the property where the discharge originates.
- 4. The discharge of odour shall not cause an objectionable or offensive effect (in the opinion of a compliance officer employed by Canterbury Regional Council to carry out air quality functions) beyond the boundary of the property where the discharge originates.
- 5. The total weight of welding rods and solder used at each construction site shall not exceed 250 kilograms per month.

CRC061933 To discharge contaminants to air from pump stations and emergency generators at the sites listed in Schedule A.8 above. A consent with a duration of 35 years is sought.

Locations:

Inlet Canal at or about map reference NZMS 260 L35:269-638; Headrace in the Waimakariri Valley at or about map reference NZMS 260 L35:352-568; Headrace near the Waianiwaniwa Dam at or about map reference NZMS 260 L35:277-477; Headrace in the Rakaia Valley at or about map reference NZMS 260 L36:121-348; Windwhistle Race Network at or about map reference NZMS 260 L36:141-385

- 1. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.
- 2. The discharge to air shall occur via a chimney stack above the ridge line of the roof of the pump station building.
- 3. The discharge shall be directed vertically into air and shall not be impeded by any obstruction above the stack which decreases the vertical efflux velocity below that which would occur in the absence of such an obstruction.

- 4. Generators shall only be used for emergency electricity supply, and shall not be used for network load shedding except during periods of national electricity supply shortage, or when requested by the lines authority during their maintenance of the local electrical distribution lines network.
- 5. The concentration of total suspended particulate in combustion gas discharged from the emission stacks, when measured in accordance with the requirements listed in Schedule AQL6 of the Proposed Canterbury Natural Resources Regional Plan, shall not exceed 500 milligrams per cubic metre of air adjusted to 0 Celsius, dry gas basis, 101.3 kilopascals, and 8 % oxygen or 12 % carbon dioxide.
- 6. The sulphur content of the fuel burnt shall not exceed 2 % by weight.

7. Hazardous Substances

CRC061948 To use and store hazardous substances at facilities associated with the

construction of the dam and reservoir. A consent with a duration of 35 years is

sought.

Locations: Waianiwaniwa River Valley, Dam and Storage Reservoir

And:

CRC061951 To use and store hazardous substances required for emergency generators and

pump stations along the Headrace Canal at the sites listed in Schedule A.8 above.

A consent with a duration of 35 years is sought.

Locations: Waimakariri River Valley, Waianiwaniwa River Valley, Hororata River Valley, and

Rakaia River Valley

- 1. The volume of the diesel storage tank shall not exceed 10,000 litres.
- 2. The containment system surrounding the storage tank shall at all times have an available capacity of at least 12,000 litres.
- 3. The containment system surrounding the storage tank shall be impermeable to prevent diesel leakage.
- 4. Design plans of the storage tank and bunded facility shall be provided to the Canterbury Regional Council prior to works commencing.
- 5. This consent is subject to the conditions listed in Schedule 2: Administrative Conditions.

8. Schedule 1: General Conditions

Schedule 1: General Conditions

- 1. All works shall be undertaken in general accordance with the application documents and evidence presented except as modified by specific conditions.
- 2. All practicable measures shall be undertaken to minimise adverse effects on property amenity values, wildlife, vegetation and ecological values. This shall include but not be limited to spillage or discharge of hazardous substances into watercourses, stormwater discharges from construction sites, and prevention of contamination of land or groundwater resources. Particular regard shall be given to avoiding disturbance of bird life, waterfowl or their nests, spawning fish and redds, and the stranding of fish in pools or river braids.
- 3. The consent holder shall submit to the Canterbury Regional Council, attention RMA Compliance and Enforcement Manager, at least one month prior to the commencement of works, a Construction Management Plan outlining the construction activities and all practices and procedures to be adopted in order that compliance with the conditions of this consent can be achieved and the effects of construction activities are minimised to the greatest extent practicable. The plan shall include, but not necessarily be limited to:
 - (a) The extent of the construction activities in terms of area.
 - (b) The types of construction methods to be adopted.
 - (c) A construction programme including timetable, sequence of events and duration.
 - (d) Details of all necessary permissions required under other legislation (eg Historic Places Trust, Reserves Act) that have been obtained in relation to the works.
 - (e) The mitigation measures to be adopted, including but not limited to sediment control, vegetation disturbance, dust, noise, odour, glare and the control of stormwater.
 - (f) An assessment of the risks associated with the construction activities and methods adopted to minimise them.
 - (g) Details concerning the storage and use of hazardous chemicals (including fuels and oils) stored or used at sites of work and provisions for refuelling and maintenance to be carried out.
 - (h) Spill Contingency Plan.

- (i) Maintenance of the construction sites in a clean and tidy state and for the recovery and removal of debris.
- (j) Contact details for person in charge of the site works.
- (k) Discovery protocol for koiwi, taonga or artefact materials.
- (l) Emergency procedures.
- (m) Construction site rehabilitation plans.
- 4. The consent holder may, at any time, submit to the consent authority, an amended Construction Management Plan provided it is for the purpose of improving the efficiency and/or quality of the construction works, or to remove or reduce an adverse environmental effect.
- The consent holder shall notify the consent authorities in writing of the proposed date
 of commencement of the construction works, at least one month prior to the start date
 of the works.
- 6. Where activities involve works in the beds and margins of rivers or water courses, the consent holder shall ensure:
 - (a) Fish and Game New Zealand Central South Island Region and The Department of Conservation shall be notified of the intention to carry out works, and their intended type and scope that are likely to cause significant disturbance of fish and bird life, not less than 48 hours prior to their commencement.
 - (b) All practicable steps shall be undertaken to:
 - (a) keep to established tracks and stream crossings; and
 - (b) prevent debris, soil, vegetation getting into the watercourse.
 - (c) The activity shall not restrict the access to flood control structures or flood control vegetation for the purposes of their repair or maintenance.
 - (d) Prior to any mechanical works being carried out, the consent holder shall ensure that:
 - (i) a suitably qualified person inspects the proposed area of works, and locates any bird breeding or nesting sites of birds that are threatened species identified as such in the Department of Conservation's "New Zealand Threat Classification System Lists 2002" or any subsequent update of these lists;
 - (ii) any person carrying out works authorised by this consent is advised of any bird breeding or nesting sites located in accordance with (i); and

- (e) (i) Instream works shall, subject to clause (ii) below, only be undertaken during the period 1 October to 30 March; or
 - (ii) works may be undertaken at any time outside the period specified in clause (i) above, only when the Canterbury Regional Council has notified the consent holder that it is satisfied from a report by a suitably qualified person engaged by the consent holder that the effects of the proposed works on fish spawning and spawning habitat will not be more than minor.
- (g) The activities and any associated equipment, materials, or debris shall not obstruct or alter the passage of water in a manner that causes:
 - (i) Any increase in the risk or potential for flooding of surrounding lands;
 - (ii) Any destabilising of lawfully established flood control structures or flood control structures or any other lawfully established structures within the beds of rivers;
 - (iii) Any increase in erosion of river beds or banks;
- (h) The works shall not prevent the passage of fish, or cause the stranding of fish in pools or channels.
- (i) No plant species listed in Schedule BLR1 of Chapter 6 "Beds and margins of lakes and rivers" of the Proposed Canterbury Natural Resources Regional Plan shall be planted.
- 7. Within two months of the completion of the construction works, the consent holder shall supply to the consent authority a complete set of "as-built" plans confirming the location of the works.
- 8. The consent holder shall within two months of completion of the construction works, issue a notice to the consent authority certifying that all construction debris or other materials from the construction works, that may pose a hazard to public safety, fishing or recreational activities, has been removed.
- 9. The consent holder shall maintain and keep a complaints register for all aspects of all operations in relation to construction activities. The register shall detail the date, time and type of complaint, cause of the complaint, and action taken by the consent holder in response to the complaint. The register shall be available to the consent authority at all reasonable times.
- 10. In the event of any disturbance of koiwi tangata (human bones) or taonga (treasured artefacts) the consent holder shall immediately"
 - (a) advise the Canterbury Regional Council of the disturbance;
 - (b) advise the appropriate Runanga, or their representative, of the disturbance.

cease earthmoving operations in the affected area until the area containing the (c) koiwi tangata or taonga has been clearly demarcated, and kaumatua and archaeologists have certified that it is appropriate for earthmoving to recommence.

Schedule 2: Administrative Conditions 9.

Schedule 2: Administrative Conditions

- 1. The Canterbury Regional Council may in the last five working days in June and December during the first five years from the date of issue of this consent, or until the completion of construction works and thereafter annually on the last five working days of June each year serve notice of its intention to review the conditions of this consent for the purpose of:
 - (a) dealing with any adverse effects on the environment which may arise from the exercise of this consent;
 - (b) ensuring the adequacy of the monitoring undertaken pursuant to this consent;
 - (c) ensuring the adequacy of sampling and/or monitoring programmes;
 - (d) dealing with any adverse effects or other issue identified in any report submitted as a condition of this consent.
- 2. Charges, set in accordance with section 36 of the Resource Management Act 1991, shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring and supervision of resource consents and for the carrying out of its functions under section 35 of the Act.