

HUNTER DOWNS IRRIGATION SCHEME
DRAFT PROPOSED CONDITIONS OF CONSENT

Water Permit to Take Water from the Waitaki River

To take water from the Waitaki River.

Duration of this Water Permit – 35 years

Conditions of this Consent:

- 1 This consent is subject to the general conditions listed in Schedule 1 - General Conditions.
- 2 The water shall be taken from the Waitaki River at or about map reference NZMS260 J40: 361-907.
- 3 The rate at which water is taken from the Waitaki River shall not exceed a maximum rate of 20.5 cubic metres per second, with a volume not exceeding 251 million cubic metres per year, for the irrigation of up to 40,000 hectares.
- 4 The rate at which water is taken from the Waitaki River shall not exceed a maximum rate of 17.5 cubic metres per second, with a volume not exceeding 213 million cubic metres per year, for the irrigation of up to 34,000 hectares when the consent CRC040428 (Waihao Irrigation Limited) is operative.
- 5 For the purposes of determining compliance with Conditions 3 and 4,
 - (a) the instantaneous rate of water take (in cubic metres per second) shall be recorded at least every 15 minutes;
 - (b) the average rate of water take (in cubic metres per second) over the previous 1-hour shall be recorded at least every 60 minutes, based on the above 15 minute instantaneous record;
 - (c) In the event that any instantaneous rate of water take (under a. above) exceeds the maximum rates of water taken in Conditions 3 and 4), then the consent holder shall ensure that the subsequent 1-hour average starting with that 15 minute period does comply with the maximum rates of water take in Conditions 3 and 4). This shall be deemed to constitute compliance with Conditions 3 and 4).
 - (d) Notwithstanding c. above, any instantaneous recorded rate of water take (under a. above) shall not be more than 10% greater than the maximum rates of water take specified in Conditions 3 and 4.

- 6 Whenever the calculated flow in the Waitaki River at the Kurow Gauge (Kurow Gauge flow map ref: 140:079-088) as estimated by the Canterbury Regional Council **plus** any flow taken upstream of the Kurow Gauge and returned downstream of the Kurow Gauge but upstream of the Hunter Downs Irrigation Scheme irrigation point of take (expressed in cubic metres per second), falls below **XXX (still to be finalised following discussions with irrigators)** cubic metres per second, the abstracted flow shall cease.
- 7 Whenever the calculated flow in the Waitaki River at the Kurow Gauge (Kurow Gauge flow map ref: 140:079-088) as estimated by the Canterbury Regional Council **plus** any flow taken upstream of the Kurow Gauge and returned downstream of the Kurow Gauge but upstream of the Hunter Downs Irrigation Scheme irrigation point of take (expressed in cubic metres per second), falls below **XXX (still to be finalised following discussions with irrigators)** cubic metres per second, then the rate of abstraction permitted shall not exceed that calculated using the formula below:

Insert details of flow sharing arrangements following discussions with irrigators.

- 8 The take of water permitted by this consent shall not be exercised until resource consents have been obtained for the construction and land use of the intake, diversion channel and irrigation delivery system, and for the divert and discharge of the water necessary for the operation of the Hunter Downs Irrigation Scheme.
- 9 The take permitted by this consent shall not be exercised during the period from [1 May] until [14 August] in each year.

Water metering

- 10 (a) Prior to water being taken under this consent, the consent holder shall install a water flow measuring device that has an International accreditation, New Zealand or equivalent calibration endorsement, to continuously measure the taking of water in terms of this consent to within an accuracy of plus or minus 10 percent.
- (b) The measuring device shall, as far as is practicable, be installed at a site likely to retain a stable rating. Installation shall be in accordance with ISO 1100/1-1981 or equivalent by a suitably qualified or experienced person.
- (c) A site inspection of the site of the measuring device shall be carried out at least once every month during the irrigation season to determine the need for re-gauging the site. In any event, the measuring site shall be gauged not less than once every three months during the irrigation season and at any other time when determined by a site inspection. This Condition 10(c) shall not be enforced if the site is a stable, man-made structure, such as concrete, steel or fibreglass channel, flume or pipe.

- (d) The rates and times of abstraction shall be recorded by electronic means, at not greater than fifteen minute intervals, with 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.
- (e) The measuring and recording device shall be available for inspection at all times by the Canterbury Regional Council.
- (f) All data from the recording device described in 10(a) shall be provided to the Canterbury Regional Council on request, and shall be accessible and available for downloading at all times by the Canterbury Regional Council.
- (g) 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 10(a) and ((b), and also certifying that data can be readily accessed.

Fish deflection barrier/fish screen

- 11
- (a) Prior to the taking of water pursuant to this consent, the consent holder shall install, operate and maintain a fish screen ("the screen") or deflection barrier across the intake designed in accordance with the certified plans approved by the Canterbury Regional Council in accordance with Condition 11(e)
 - (b) The screen or deflection barrier shall as far as practicable prevent the entrainment, impingement and entrapment of salmonids including adults, fingerlings and fry and for the purposes of this condition this shall be achieved by installing, operating and maintaining a fish screen or deflection barrier in accordance with the certified design plans referred to in Condition 11(a).
 - (c) The design plans for the screen or deflection barrier shall be certified by: a chartered engineer with experience in the design and operation of fish screens and deflection barriers; and either a fisheries biologist with post-graduate qualifications in salmonid fisheries or a fisheries biologist with internationally recognised experience in salmonid fisheries research ("the certifiers").
 - (d) The appointment of the certifiers by the consent holder shall be subject to the prior written approval of the Canterbury Regional Council.
 - (e) Prior to the commencement of construction of the fish screen or deflection barrier:
 - (i) The consent holder shall provide to the Canterbury Regional Council:

- a) The certified design plans including the screen or deflection barrier slot/aperture size, sweep velocity, approach velocity and, if relevant, an ineffective by-pass which returns fish to an active flow braid of the Waitaki River;
- b) A report from the Certifiers which certifies and explains how the certified design and operation of the screen or deflection barrier:
 - o Demonstrates best practice in achievement of Condition 11(b);
 - o Takes into consideration regional or national guidelines in relation to fish screen and deflection barrier design or any international guidelines that the certifiers consider relevant.
- (ii) The Canterbury Regional Council shall give written notice to the consent holder stating whether or not it approves of the certified design plans within 20 working days of receipt of those plans and the certifiers report referred to in Condition 11(e)(i) and such approval shall not be unreasonably withheld.
- (f) The consent holder shall also carry out any associated works and flow modifications within the intake pond (headpond) to accommodate the screen or deflection barrier.
- (g) The consent holder shall, prior to commissioning, provide a certificate from a suitably qualified person confirming that construction of the screen or deflection barrier has occurred in accordance with the design plans approved by the Canterbury Regional Council.
- (h) After installation the consent holder shall commission an audit by an independent research organisation approved by the Canterbury Regional Council for one migration season to determine the effectiveness of the screen or deflection barrier installed. The methodology to be adopted shall be approved by the Canterbury Regional Council. The consent holder shall provide the results of the audit to the Canterbury Regional Council within 18 months of the commissioning of the Hunter Downs Irrigation Scheme take.
- (i) The consent holder shall monitor the effectiveness of the fish screening or fish deflection barrier and the bypass system and shall provide a report to the Canterbury Regional Council annually by 30 June after the provision of the audit report pursuant to condition 11(h)
- (j) The consent holder may apply to change condition 11 and the [attached plan] of this consent pursuant to section 127 of the Resource Management Act 1991 if it can show that fish screening or fish deflection is no longer necessary or appropriate at the location specified in that condition.

- (k) The fish screen or deflection barrier shall be inspected at regular intervals for any damage causing fish to pass through the screen or device, or once every 24 hour period when the flow in the Waitaki River at the Kurow Gauge (Kurow Gauge flow map ref: 140:079-088) **plus** any flow taken upstream of the Kurow Gauge and returned downstream of the Kurow Gauge but upstream of the Hunter Downs Irrigation Scheme irrigation point of take as estimated by the Canterbury Regional Council is greater than 450 cubic metres per second.
- (l) Within 24 hours of the fish screen or deflection device becoming damaged or ineffective, the consent holder shall notify the Canterbury Regional Council of the situation, any remedial measures to be implemented, and the likely timeframes for implementing those measures. The consent holder shall use its reasonable endeavours to restore the effectiveness of the fish exclusion measures in accordance with Condition 11(b) as soon as possible. This consent shall not be exercised if the effectiveness of the fish screen or deflection device in accordance with Condition 11(b) has not been restored within 30 days of the fish screen or deflection device first becoming damaged or ineffective.

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Water Permit to Use Water from the Waitaki River for Irrigation

To use water taken from the Waitaki River for the purposes of irrigation.

Duration of this Water Permit – 35 years

Conditions of this Consent:

- 1 This consent is subject to the general conditions listed in Schedule 1 - General Conditions.
- 2 The water shall be used for the irrigation of up to 40,000 hectares of land within the Scheme Area generally in accordance with the attached plan entitled "Hunter Downs Irrigation – Scheme Area", and ancillary purposes associated with the operation of the Hunter Downs Irrigation Scheme.

Groundwater and Surface Water Monitoring

- 3 (a) Representative samples of groundwater and surface water shall be taken for the monitoring of water quality effects, as detailed within the Scheme Management Plan referred to in Condition 2 of Schedule 1 – General Conditions:
 - (i) All samples shall be analysed for nitrate-nitrogen, ammonia-nitrogen, total phosphorus, dissolved reactive phosphorus, conductivity, pH and e-coli bacteria by a laboratory accredited to NZS/ISO/IEC Guide 17025 or equivalent, defined by and accreditation body recognised as operating to ISO/IEC Guide 58 for those analysis; and
 - (ii) A summary of the results of the analyses of all samples taken shall be provided to the Canterbury Regional Council as part of the Annual Environmental Report required by Condition 7 of Schedule 1 – General Conditions, by no later than 31 July for each year after the date on which the scheme is commissioned.
- (b) Water level measurements shall be taken for the monitoring of groundwater level effects in the Scheme Management Plan referred to in Condition 2 of Schedule 1 – General Conditions. A summary of the result of the analysis of water levels and showing the mean level shall be provided to the Canterbury Regional Council as part of the Annual Environmental Report required by Condition 7 of Schedule 1 – General Conditions, by no later than 31 July each year after the date on which the scheme is commissioned.

Schedule 1
General Conditions

- 1 The exercise of these consents shall be undertaken generally in accordance with the following documents (where applicable), except where amendments are required by conditions of these consents. In the event of differences or conflict between the measures described in the documents and the conditions, the conditions shall prevail.
- a. Meridian Energy Limited, South Canterbury Irrigation Trust, and Hunter Downs Irrigation, Hunter Downs Irrigation Proposal, Assessment of Environmental Effects for Applications for Resource Consents, dated 6 October 2006; except as amended within the evidence given by witnesses for Meridian Energy Ltd, South Canterbury Irrigation Trust and Hunter Downs Irrigation during the hearing of the resource consent applications.

Scheme Management Plan

- 2 (a) Prior to the Hunter Downs Irrigation Scheme (the Scheme) being commissioned the consent holder shall prepare and submit to the Canterbury Regional Council a Scheme Management Plan which sets out the practices and procedures to be put into place to operate the water take and delivery of water to the command area and to monitor the environmental effects arising from the scheme, so as to ensure compliance with the conditions of consent and to minimise the potential for adverse effects on the environment arising from the exercise of these consents. The Scheme Management Plan shall, as a minimum, address:
- (i) Operational requirements for the take of water for the Scheme from the Waitaki River with respect to water sharing arrangements with other abstractors during times of low flows in the Waitaki River.
- (ii) Operational rules for the Scheme including responsibilities and arrangements for water management and distribution, including allocation during water shortages;
- (iii) Procedures to prepare, implement, regularly review and update individual Farm Management Plans for all properties receiving water in terms of these consents, in order to:
- achieve efficient use of water;
 - minimise adverse effects on groundwater and surface water quality, particularly in terms of nitrification;
 - minimise adverse effects on groundwater levels;
 - minimise adverse effects on water bodies and riparian areas;
 - safeguard significant indigenous biodiversity;

- provide information to the Scheme including land use, area irrigated, stock numbers, and fertiliser use.
- (iv) Procedures to regularly review and update the template to be used as the basis for the individual Farm Management Plans, including provision for consultation with Community and Ngai Tahu Liaison Groups and water users.
- (v) Provision for an annual internal audit of compliance with the provisions of the Farm Management Plans, including provision for consultation with Community and Ngai Tahu Liaison Groups and water users. The annual audit is to be undertaken by a person who is independent of the consent holder. Each Farm Management Plans shall be audited for the first 3 years following the initial delivery of water to that property or any increase in the quantity of water delivered to that property. After that time, every water user which has received water for more than 3 years shall be audited at least once every 5 years. A report of each audit shall be provided to the water users on each property audited and to the consent holder. An overall audit report shall also be prepared covering compliance generally on all properties audited.
- (vi) Compliance monitoring and enforcement procedures for water users, including the circumstances under which the provision of water to any property is discontinued or water is not provided.
- (vii) Provision of ongoing education, training and information to assist water users in preparation and implementation of Farm Management Plans, including efficient use of water, best practice farming and environmental management;
- (viii) Procedures to uphold and respect Ngai Tahu values in relation to water, the natural environment and other taonga through maintaining an ongoing consultative relationship with South Canterbury / North Otago Ngai Tahu;
- (ix) Measures to manage irrigation infrastructure that comprise the Scheme to protect water quality.
- (x) Measures to safeguard biodiversity and ecosystem values within the scheme area, including opportunities for biodiversity enhancement, including procedures in relation to the Scheme Environmental Management Fund required under Condition 2(a)(xiii);
- (xi) How the fish deflection mechanism [or fish screen], constructed in accordance with Condition 11 of the resource consent to take water from the Waitaki River for the Scheme, will be operated and maintained;

(xii) Environmental monitoring requirements, including:

- How the monitoring of the water take will be accomplished to enable determination of compliance with the Conditions of the resource consent to take water from the Waitaki River;
- Measures to monitor and, if necessary, manage ground and surface water quality within and downstream of the scheme area;
- Measures to monitor and, if necessary, manage groundwater and surface water levels within and downstream of the scheme area, including methods of working with the ECan engineering services team and Waihao – Wainono Water Users Group with respect to monitoring and managing changes in surface water levels as a result of the exercise of these consents.

(xiii) Provisions for the establishment and operation of a Scheme Environmental Management Fund to be used to fund environmental management projects, including:

- Fund structure and management;
- The level of levy (initially \$2 per hectare of irrigated land per annum)
- When the levy starts to be paid (5 yr after first receiving water)
- Criteria for calling for, selecting and approving applications;
- Criteria for a rebate of the Scheme Environmental Management Fund levy to recompense for costs of environmental enhancement work on their own properties. (up to 50%)
- The criteria for increasing the levy (Producer price index)

(b) The consent holder shall at all times comply with and implement the provisions of the Scheme Management Plan, except to the extent that the Scheme Management Plan or any of its provisions are inconsistent with the conditions of this consent.

(c) The consent holder shall review the Scheme Management Plan annually by 31 July for the first five years and then every three years thereafter by the consent holder in consultation with the Canterbury Regional Council. Each review will take into account the information gained through the Community and Ngai Tahu Liaison Groups and from the monitoring required by the conditions of this consent. The review shall:

- (i) assess whether management practices are resulting in compliance with the conditions of these consents, and whether the purpose and objectives of the Scheme Management Plan are being met through the actions and methods undertaken; and

- (ii) propose any amendments that the consent holder considers necessary to better achieve the purpose and/or objectives of the Scheme Management Plan.
- (d) Prior to finalising its initial Scheme Management Plan, and then prior to each review of, and any amendments to, the Scheme Management Plan, the consent holder shall provide the proposed plan, and any amendments, to the Community Liaison Group. The consent holder shall then receive, and give due consideration to feedback from the Community and Ngai Tahu Liaison Groups prior to finalising the initial Scheme Management Plan, each review of, and any amendments to, the Scheme Management Plan.
- (e) Following the completion of the process outlined in Conditions 2(a) to (d), the consent holder shall provide the initial Scheme Management Plan and each amended Scheme Management Plan to Canterbury Regional Council, along with the consent holder's Annual Environmental Report (refer Condition 7 of this Schedule).

Individual Farm Management Plans

- 3 (a) Prior to delivery of any water from the Hunter Downs Irrigation Scheme, and following each review and any amendments, the consent holder shall provide the template for the individual Farm Management Plans to be prepared for each property receiving water from the Scheme to the Canterbury Regional Council. The template shall provide for the matters prescribed by the Scheme Management Plan to be included in the individual Farm Management Plans.
- (c) The agreement to supply water between the consent holder and each property receiving water from the Scheme shall include a provision enabling the consent holder to restrict or cease the supply of water to that property in the event of any individual non-compliance with the implementation requirements of the individual Farm Management Plan for that property. This agreement shall require the consent holder to exercise its power to restrict or cease the supply of water to that property in the event of continuing non-compliance after having given 10 days notice of a requirement to remedy that non-compliance.

Community Liaison Group

- 4 (a) The consent holder shall, prior to the exercise of these consents, undertake an open, public process to offer membership positions on a Community Liaison Group.
- (b) The Community Liaison Group shall consist of a maximum of five persons with a preference for representatives who can each demonstrate skills or knowledge in at least one of the following:
 - (i) Recreational uses of the Lower Waitaki River and South Canterbury Region;

- (ii) Sustainable irrigated agricultural practices;
 - (iii) Water quality and sustainable land management;
 - (iv) Community and/or business in South Canterbury;
 - (v) Lowland drainage and drainage network operation
 - (vi) Management of indigenous biodiversity.
- (c) The members of the Community Liaison Group shall be offered the opportunity of 6 monthly meetings or less as determined by the Community Liaison Group, an annual inspection of the irrigation area, and the provision of any information to which Canterbury Regional Council is entitled by virtue of this consent, at the consent holder's expense.
- (d) If the Community Liaison Group elects to hold a meeting in accordance with Condition 4(c), then the Scheme manager or their nominated representative shall attend the meeting.
- (e) At least one representative from each of Canterbury Regional Council and Waimate District Council shall be invited to attend meetings in an observer capacity.
- (f) The main purposes of the 6 monthly meetings of the Community Liaison Group are to:
- (i) Provide input and feedback into the preparation, implementation, review and amendment of the Scheme Management Plan and Farm Management Plan templates;
 - (ii) Receive and discuss the results of monitoring and reporting as required by the conditions of these consents, including the Annual Environmental Report and the annual overall audit report on compliance with the Farm Management Plans, prepared by the consent holder;
 - (iii) Discuss, as far as practicable, any community concerns regarding the operation of the Hunter Downs irrigation scheme.
 - (iv) Review and recommend projects for the distribution of funds from the environmental levy to environmental management projects in accordance with Condition 2(a)(xiii).
- (g) In particular, the members of the Community Liaison Group shall be offered the opportunity to review and comment on the initial Scheme Management Plan and the initial Farm Management Plan templates, the reviews of and amendments to

the Scheme Management Plan and Farm Management Plan templates, the consent holder's Annual Environmental Report including the annual overall audit report on compliance with the Farm Management Plans.

- (h) The Community Liaison Group will be provided with the opportunity to submit information to the Canterbury Regional Council annually in relation to the review of the Scheme Management Plan and the template for the Farm Management Plans.

Ngai Tahu Liaison Group

- 5 (a) The consent holder shall, prior to the exercise of the consent, offer Te Runanga o Arowhenua, Te Runanga o Waihao, Te Runanga o Moeraki and Manawhenua the opportunity to establish a six person Ngai Tahu Liaison Group.
- (b) The members of the Ngai Tahu Liaison Group shall be offered the opportunity of 6 monthly meetings or less as determined by the Ngai Tahu Liaison Group, an annual inspection of the irrigation area, and the provision of any information to which Canterbury Regional Council is entitled by virtue of this consent, at the consent holder's expense.
- (c) If the Ngai Tahu Liaison Group elects to hold a meeting in accordance with condition 5(b), then the Scheme manager or their nominated representative shall attend the meeting.
- (d) At least one representative from Canterbury Regional Council and Waimate District Council shall be invited to attend meetings in an observer capacity.
- (e) The main purposes of the 6 monthly meetings of the Ngai Tahu Liaison Group are to:
 - (i) Provide input and feedback into the preparation, implementation, review and amendment of the Scheme Management Plan and the Farm Management Plan templates;
 - (ii) Receive and discuss the results of monitoring and reporting as required by the conditions of these consents, including the Annual Environmental Report and the annual overall audit report on compliance with the Farm Management Plans, prepared by the consent holder;
 - (iii) Discuss, as far as practicable, any Ngai Tahu concerns regarding the operation of the Hunter Downs irrigation scheme.
 - (iv) Review and recommend projects for the distribution of funds from the environmental levy to environmental management projects in accordance with Condition 2(a)(xiii).

- (f) In particular, the members of the Ngai Tahu Liaison Group shall be offered the opportunity to review and comment on the initial Scheme Management Plan and the initial Farm Management Plan templates, the reviews of and amendments to the Scheme Management Plan and Farm Management Plan templates, the consent holder's Annual Environmental Report including the annual overall audit report on compliance with the Farm Management Plans.
- (g) The Ngai Tahu Liaison Group will be provided with the opportunity to submit information to the Canterbury Regional Council annually in relation to the review of the Scheme Management Plan and the Farm Management Plan templates.

Suitable Person for Scheme Management, Management Plans, Monitoring and Environmental Reporting

- 6 The consent holder shall retain a suitably qualified and/or experienced person or persons to operate the Hunter Downs Irrigation Scheme, to supervise the preparation, review and implementation of the Scheme Management Plan, to assist with the preparation, review and implementation of the individual Farm Management Plans, to ensure compliance with the conditions of these consents, the implementation and review of the monitoring required by these consent conditions, and the preparation of the Annual Environmental Report.

Environmental Reporting

- 7 The consent holder shall complete an Annual Environmental Report and provide it to the Canterbury Regional Council, by 31 July each year, covering the following matters
 - (a) A summary of the operation of the water take and use, and the associated river flows, in the preceding 12 months, based on the monitoring, undertaken as part of the exercise of these consents;
 - (b) An overall audit report covering compliance generally of all users with the provisions of their Farm Management Plans in accordance with Condition 2(a)(v)
 - (c) The results of monitoring undertaken as part of the exercise of these consents (the Annual Environmental Report) in accordance with Condition 2(a)(xii) of this Schedule and Condition 3 of the water permit to use water from the Waitaki River for the irrigation Scheme.
 - (d) A report on the monitoring of the effectiveness of the [fish screening or] fish deflection barrier and the bypass system in accordance with Condition 11 of the water permit to take water from the Waitaki River for the irrigation Scheme.
 - (e) Explanations of any changes in the preceding 12 months from the previous Annual Environmental Report.
 - (f) A description of mitigation, rehabilitation, monitoring and reporting intended to be carried out in the next 12 months with an approximate timetable of activities.

(g) A description and analysis of any unexpected adverse effect on the environment that has arisen as a result of the exercise of these consents in the last 12 months, the steps taken in response to that effect, and the results of those steps.

8 Copies of each Annual Environmental Report shall also be made available by the Consent Holder to all "water users", the Community and Ngai Tahu Liaison Groups.

Review of conditions

9 Canterbury Regional Council may, on the last working day of June each year, serve notice of its intention to review conditions of these consents for the purposes of dealing with any adverse effects on the environment which may arise from the exercise of the consents and which it is appropriate to deal with at a later stage.

Lapsing date

10 The lapsing provisions of section 125 of the Resource Management Act 1991 shall not apply until after the expiry of 10 years from the date of grant of all the consents necessary for the construction and use of the intake, diversion channel and irrigation delivery system, and for the use and discharge of the water necessary for the operation of the Hunter Downs Irrigation Scheme.

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