

1. Safety at intake

- (a) Prior to the taking of water pursuant to this consent, the consent holder shall design an intake structure that shall, as far as practicable, prevent water users becoming pinned against or washed into the intake on the Waimakairiri River.
- (b) The safety features of the intake structure shall be designed in consultation with the White Water New Zealand and the New Zealand Jet boat Association.
- (c) The intention of the safety features will be to achieve, if reasonably practicable, an overall International Grade 2 standard suitable for racing kayaks. These shall generally be in accordance, where relevant, with USA Grade 2 definition, i.e. "Straightforward rapids with wide, clear channels which are evident without scouting. Occasional manoeuvring may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful, is seldom needed."
- (d) The design shall incorporate the following:
 - (i) the intake shall be recessed into the face of the rock cliff so that all gates, together with their supports, and at least the upper part of the trash rack are built behind the general natural line of the cliff face,
 - (ii) an inclined trash rack shall be constructed and maintained on the upstream face of the intake gate, leading to a safety ledge and exit point, with exit paths leading both back to the river, where a kayaker may re-enter his/her racing kayak, and away from the river, at the choice of the user. The exit paths shall be such that a person carrying a racing kayak can traverse the path safely. The dimensions of the trash rack shall be such that velocities approaching it do not exceed 1 metre per second. The trash rack shall extend to the bottom of the river bed, except that this condition shall not apply when the river is in flood,
 - (iii) the surfaces presented to the water shall be free from sharp protrusions which could injure a person or snag clothing.
- (e) The design plans for the intake shall be certified by:
 - (i) a suitably qualified person with experience in the design and operation of intake structures, and
 - (ii) A person with experience in water safety, particularly for recreational boating and kayaking on rivers.
- (f) Prior to the commencement of construction of the intake structure, the consent holder shall provide to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager:
 - (i) The certified design plans;
 - (ii) A report from the certifiers which certifies the design and operation of the safety features on the intake structures which demonstrates best practice in achievement of Condition 7(a) to 7(d);
- (g) A person duly authorised by 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 the plans and the certifiers report referred to in Condition 7(f)(ii) and such approval shall not be unreasonably withheld.
- (h) The consent holder shall, prior to commissioning, provide a certificate from a suitably qualified person confirming that construction of the intake structure has occurred in accordance with the certified design plans approved in accordance with Condition 7(g).

- (i) The consent holder shall install, operate and maintain an intake structure designed in accordance with the certified plans approved by a person duly authorised by the Canterbury Regional Council in accordance with Condition 7(g).
- (j) Prior to the first exercise of this consent, the consent holder shall erect and maintain two signs warning of the intake structure at two locations upstream from the intake. The signs shall be visible on the banks and by in-river users and the location, size and wording shall be developed in consultation with White Water New Zealand and to the approval of the Canterbury Regional Council.
- (k) The consent holder shall, as far as is practicable, inform all commercial users and recreational boat clubs of the position of the intake, within one month of the start of construction. A copy of the written notice and a list of those parties notified shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager at least 20 working days prior to the construction on the intake.
- (l) Within six months of commencement of operation the consent holder shall conduct live tests of the intake under a range of river flow conditions and intake flows, and
 - (i) shall invite Whitewater NZ and the New Zealand Jet Boat Association to observe and participate in those tests, and
 - (ii) shall invite Whitewater NZ and the New Zealand Jet Boat Association to comment on potential modifications to design and operation, and
 - (iii) shall report to the Canterbury Regional Council on the tests including recommended modifications to design and operation and including comments made by Whitewater NZ and the New Zealand Jet Boat Association.