## Water Conservation (Rangitata River) Order 2006

- Enacted via Order of Council on 19 June 2006
- Includes identification of waters to be retained in natural state, waters to be protected and waters to be protected as contributing to outstanding features.
- The Rangitata River in the location of the proposed works is identified in Schedule 2 of the Order, being Protected Waters.
- Provides standards to be met in association with the development of planning documents and consideration of resource consent applications.
- Clause 13 identifies an exemptions process that allows a Consent Authority to grant resource consent that would otherwise contravene the conditions set out in Clauses 8-11.
- Reasonable mixing is defined as:

Reasonable mixing means the mixing that occurs:

- (a) within a maximum radius of 200 metres from a discharge into a still water body; or
- (b) within a maximum distance of 100 metres downstream from a discharge into the river including all tributaries (both named and un-named on the NZMS 260 maps) and in particular including the Ealing Springs and McKinnons Creek.

Water Conservation Order – Rangitata Section	Compliance	Comment
8. Restrictions on damming of waters	Compliance	<ul> <li>(1) No resource consent may be granted or rule included in a regional plan authorising the damming of the waters specified in Schedules 1 and 2. For the purposes of this clause, damming does not include any intake or deflection structure that does not—         <ul> <li>(a) prevent the passage of any salmon; or</li> <li>(b) reduce the use of the waters for rafting or canoeing; or</li> <li>(c) reduce the aquatic bird habitat; or</li> <li>(d) intrude visually to the extent that it reduces wild and scenic values.</li> </ul> </li> <li>(2) No resource consent may be granted or rule included in a regional plan authorising the damming of the waters specified in Schedule 3, whenever that Schedule refers to this clause, if that will cause, either by itself or in combination with any other existing consents as at 1 January 2000, or rules—                 <ul></ul></li></ul>
		<ol> <li>The Rangitata River in the vicinity of the proposal is identified in Schedule 2 (Protected Waters).</li> <li>Complies. No damming of the river is proposed.</li> <li>Complies. The fish return will assist with the return of sediment to the Rangitata River. It is noted that the existing RDR includes a sand trap to filter and return sediment to the river. The construction of the fish return will not result in the reduction in aquatic bird habitat.</li> <li>N/A</li> </ol>
9. Restrictions on alteration of river flows and form	Complies	<ul> <li>(1) No resource consent may be granted or rule included in a regional plan that will cause the material alteration of the channel cross-section, or meandering pattern, or braided river channel characteristics of the form of any river specified in Schedule 2.</li> <li>(2) The restriction in subclause (1) does not apply in respect of dams, weirs, roads, fords, bridges, or fish passes authorised at the date this order comes into force.</li> <li>(3) No resource consent may be granted or rule included in a regional plan—         <ul> <li>(a) authorising the abstraction of water from any part of the Rangitata River (including any and all calculated river depletion effects resulting from the taking of water from hydraulically connected groundwater sources as calculated in accordance with subclause (9)) specified in items 1, 2 and 3 of Schedule 2 and item 1 of Schedule 3</li> </ul> </li></ul>

that will cause, either by itself or in combination with any other existing consents or rules, decrease of the naturally occurring instantaneous flow of water at Klondyke by more than 2% when the naturally occurring flow at Klondyke
is less than or equal to 110 m³/s; or
(b) authorising the abstraction of water that will cause, either by itself or in combination with any other existing consents (including any and all calculated river depletion effects resulting from the taking of water from hydraulically connected groundwater sources as calculated in accordance with subclause (9)) or rules, decrease of the naturally occurring instantaneous flow of water in any river specified in item 2 of Schedule 3 by more than
15% when the naturally occurring flow at Klondyke is less than or equal to 110 $m^3/s$ ; or
(c) authorising the abstraction of water that will cause, either by itself or in combination with any other existing consents (including any and all calculated river depletion effects resulting from the taking of water
from hydraulically connected groundwater sources as calculated in accordance with subclause (9)) or rules, total abstraction from all parts of the Rangitata River specified in Schedules 1, 2 or 3 to exceed a maximum of 33 m <sup>3</sup> /s unless the naturally occurring flow at Klondyke exceeds 110 m <sup>3</sup> /s at which point the maximum may be extended from 33 m <sup>3</sup> /s to 33 m <sup>3</sup> /s plus any naturally occurring flow in excess of 110 m <sup>3</sup> /s; or
(d) if the effect is that the number of take sites (excluding groundwater take sites) authorized to take more than 100 l/s at each site from those parts of the Rangitata River specified in items 4 and 5 of Schedule 2 is greater than a maximum of four.
<ul> <li>(4) For the period from 15 September to 14 May in the following year, there shall be a flow management regime in respect of the main stem of the Rangitata River (including any and all calculated river depletion effects resulting from the taking of water from hydraulically connected groundwater sources as calculated in accordance with subclause (9)) comprising—</li> </ul>
(a) a minimum flow of 20 m <sup>3</sup> /s; and
(b) when the flow at Klondyke is greater than 20 m <sup>3</sup> /s but less than 40 m <sup>3</sup> /s all flow in excess of 20 m <sup>3</sup> /s is available to be taken; and
(c) when the flow at Klondyke is greater than 40 m³/s but less than 66 m³/s, up to 33 m³/s may be taken on the basis of a 1: 1 sharing between in- stream retention and water abstraction; and
(d) when the flow at Klondyke is greater than 66 m³/s and less than 110 m³/s no more than 33 m³/s shall be taken.
(5) For the period from 15 September to 14 May in the following year, there shall be a flow management regime in respect of the main stem of the Rangitata River (including any and all calculated river depletion effects resulting from the taking of water from hydraulically connected groundwater sources as calculated in accordance with subclause (9)) comprising—
(a) a minimum flow of 15 m <sup>3</sup> /s; and
(b) when the flow at Klondyke is greater than 15 m <sup>3</sup> /s and less than 30 m <sup>3</sup> /s all flow in excess of 15 m <sup>3</sup> /s is

	available to be taken y ar
	available to be taken; or (a) when the flow at Klenduke is greater than $20 m^2/c$ and less than 66 m <sup>2</sup> /c, up to $22 m^2/c$ may be taken, on the
	(c) when the flow at Klondyke is greater than 30 $m^3$ /s and less than 66 $m^3$ /s, up to 33 $m^3$ /s may be taken, on the
	basis of a 1: 1 sharing between in- stream retention and water abstraction
	(d) when the flow at Klondyke is greater than 66 m³/s and less than 110 m³/s no more than 33 m³/s shall be
	taken.
(6)	
	(a) all surface abstractions and abstractions of hydraulically connected groundwater sources as calculated in
	accordance with subclause (9) are being fully exercised; and
	(b) the Rangitata River flow never exceeds 110 m <sup>3</sup> /s at Klondyke.
(7)	
	combination with other existing consents (including any and all calculated river depletion effects resulting from the
	taking of water from hydraulically connected groundwater sources as calculated in accordance with subclause (9)) or
	rules, reduction of the naturally occurring instantaneous flow in McKinnons Creek at Wallaces Bridge (map reference
	NZMS 260 K38:887716) below a minimum flow of 300 l/s.
(8)	
	are not hydraulically connected to the Rangitata River or its tributaries.
(9)	
	(a) from groundwater abstraction is equal or greater than 90% of the bore pump rate after seven days
	continuous steady pumping, then:
	(i) it shall be managed as though it is a surface water abstraction; and
	(ii) the maximum instantaneous pumping rate from the bore shall be included in the surface
	water allocation total.
	(b) from groundwater abstraction is less than 90% of the bore pump rate after seven days continuous steady
	pumping but greater than or equal to 50% of the bore pump rate after 150 days continuous steady pumping,
	then:
	(i) it shall be managed so that any calculated river depletion effect which is greater than 5 l/s is
	subject to surface water allocation rules; and
	(ii) the effect on river flow after 150 days of pumping at the continuous rate required to deliver
	the seasonal volume shall be included in the surface water allocation total.
	(c) is less than 50% but greater than or equal to 25% of the pump rate after 150 days continuous steady
	pumping, then:
	(i) the abstraction should not be subject to any surface water restriction rules; and
	(ii) the effect on river flow after 150 days of pumping at the continuous rate required to deliver
	the seasonal volume shall be included in the surface water allocation total for those consents where the effect is

		greater than 5 l/s.
		(10) The restrictions in subclauses (3) to (5) do not apply in respect of a take of water for the purpose of a fish bypass
		system and which is discharged back into the Rangitata River within 2500 metres downstream of the point of abstraction.
		Comments
		1. Complies. There is no alteration proposed to the intake structure. The proposed fish return structure will be integrated
		into the existing river channel without alteration to the channel cross-section.
		<ol> <li>N/A.</li> <li>N/A, refer clause 10.</li> </ol>
		4. N/A, refer clause 10.
		5. N/A, refer clause 10.
		6. N/A. The proposal does not include a ground water take.
		7. Complies. The proposed fish return is located 1,400 metres downstream from the existing intake structure and as such
		the additional water take will not result in a reduction in flows at the identified locations beyond the consented level.
		8. N/A.
		9. N/A.
		10. Applicable. The proposed water take is specifically for the purposes of enabling a fish bypass system. The proposal
		includes the discharge of water to the Rangitata River within 1,400 metres of the intake.
10. Requirement to maintain fish passage	Complies	(1) No resource consent may be granted or rule included in a regional plan relating to the waters identified in Schedule 2, authorising an activity that will adversely affect the passage of salmon, where Schedule 2 identifies salmon passage or salmon spawning as an outstanding characteristic or contributing to an outstanding characteristic.
		(2) No resource consent in relation to an intake site may be granted, or rule included in a regional plan, for the waters specified in Schedule 2 authorising an activity unless that resource consent provides for fish exclusion or a fish bypass system to prevent fish from being lost from the specified waters.
		Comments
		Complies. The purpose of the proposed fish return structure is to ensure fish are returned back to the river. The proposed fish
		screen will ensure that this is achieved more efficiently.
11. Restrictions on alteration of water		(1) No resource consent may be granted or rule included in a regional plan authorising a discharge into any of the waters
quality		identified in Schedules 2 or 3 at any time, if, after allowing for reasonable mixing of the discharge with the receiving
		waters, the discharge will alter the natural temperature of the receiving water by more than 3 degrees Celsius provided
		that:
		(a) the alteration does not increase the water temperature to more than 12 degrees Celsius during the months
		May to September (inclusive); and
		(b) the alteration does not increase the water temperature to more than 20 degrees Celsius during the months

<ul> <li>October to April (inclusive).</li> <li>(2) No resource consent may be granted or rule included in a regional plan authorising a discharge into any of the waters identified in Schedule 2 or Schedule 3, unless, after allowing for reasonable mixing of the discharge with the receiving waters, any change in the acidity or alkalinity in the receiving waters, attributable to that discharge, maintains the pH within the range of 6 to 9 units.</li> <li>(3) No resource consent may be granted or rule included in a regional plan authorising a discharge into any of the waters identified in Schedule 2 or Schedule 3, unless, after allowing for reasonable mixing of the discharge with the receiving waters — <ul> <li>(a) there will be no undesirable biological growths attributable to the discharge;</li> <li>(b) in particular there will be no:</li> <li>(i) bacterial and/or fungal slime growths that are visible to the naked eye; and/or</li> <li>(ii) maximum biomass cover of streams or river beds by:</li> <li>(A) periphyton as filamentous growths (longer than 20 mm) exceeding 30%; and/or biomass exceeding 120 mg/m² as chlorophyll a, and/or biomass exceeding 35 g/m² ash free dry weight, as area of exposed substrate (i.e., tops and sides of visible stones); and/or</li> <li>(B) periphyton as diatoms or mats (more than 3 mm average thickness) exceeding 60%; and/or biomass exceeding 20 mg/m² as chlorophyll a, and/or biomass exceeding 35 g/m² ash free dry weigh, as area of exposed substrate (i.e., tops and sides of visible stones).</li> <li>(c) aquatic organisms shall not be rendered unsuitable for human consumption through the accumulation of contaminants; and/or</li> <li>(i) the water is not made unsuitable for contact recreation by:</li> <li>(i) the presence of contaminants; or</li> <li>(ii) a single sample of bacterial values exceeds 550 E. coli per 100 ml.</li> </ul> </li> <li>(4) No resource consent may be granted or rule included in a regional plan authorising a discharge into any of the waters identified in Schedule 2 or</li></ul>
appropriate standards.
2. Complies. There will be no additional contaminants entered into the water and as such the discharge will meet the
appropriate standards.
3. Complies. There will be no additional contaminants entered into the water and as such the discharge will meet the
appropriate standards.
<ol> <li>Complies. There will be no additional contaminants entered into the water and as such the discharge will meet the appropriate standards.</li> </ol>

13. Exemptions	Nothing in this order prevents the grant of a resource consent that would otherwise contravene the conditions set out in Clauses 8 to 11 if—
	(a) a consent authority is satisfied that—
	(i) there are exceptional circumstances justifying the grant of the permit; or
	(ii) the permit is for a discharge that is of a temporary nature; or
	(iii) the permit is for a discharge that is associated with necessary construction and maintenance
	work relating to works and structures not otherwise prohibited by this Order; and
	(b) the exercise of any such resource consent would not compromise the preservation and protection of the
	outstanding characteristics and features identified for the waters specified in the Schedules.
	Comments
	This section allows for the grant of resource consent for a breach of the Order where it is determined that the proposal remains consistent with the outcomes sought by the Order. It is noted that the proposal complies with the Order.