Summary - Plan Change 4 (Canterbury Land and Water Plan)

Note: Rule 5.94C is the only additional rule breached that has been introduced by PC4 that is different from the provisions of the PLWRP.

The remaining rules identified in this assessment are breaches identified in the PLWRP assessment that have text altered as a result

of PC4.

Rule 5.94C identifies the proposal as a Restricted Discretionary Activity resulting from the discharge of construction stormwater from an area larger than two hectares (Rule 5.94A).

Rule 5.118 identifies the proposal as a **Discretionary Activity** resulting from the taking of water from the existing canal network to provide a water supply for construction activities (**Rule 5.116**).

Rule 5.123 identifies the proposal as a **Restricted Discretionary Activity** resulting from the taking of an additional 10m³/s of water from the Rangitata River during periods of flood flows (<u>underlying PLWP rule not operative</u>).

<u>Rule 5.141A</u> identifies the proposal as a <u>Discretionary Activity</u> resulting from the disturbance of the bed of the Rangitata River during the construction of the sluice channel, wetland and the fish bypass outlet (**Rule 5.136**) and the temporary discharge of sediment to water during the construction of the sluice channel, lower terrace restoration area and the fish bypass outlet (**Rule 5.141**).

Rule 5.153 identifies the proposal as a **Discretionary Activity** resulting from the temporary discharge of sediment associated with the construction of the sluice channel, lower terrace restoration area and the fish bypass outlet (**Rule 5.152**).

Rule 5.155 idenifies the proposal as a **Discretionary Activity** resulting from the construction of a dam on land holding a volume of water greater than 5,000m³ and having a water depth greater than 3 metres (**Rule 5.154**) (<u>underlying PLWP rule not operative</u>).

Rule 5.176 identifies the proposal as a **Restricted Discretionary Activity** resulting from earthworks over an aquifer of over 100m² in volume and within 50 metres from a water body (**Rule 5.175**).

Construct	Construction-Phase Stormwater			
Rule	Compliance	Comment		
5.94A	Does Not Comply	The discharge of construction-phase stormwater to a surface waterbody, or onto or into land in circumstances where a contaminant may enter groundwater or surface water, is a permitted activity, provided the following conditions are met:		
		1. The area of disturbed land from which the discharge is generated is less than:		
		(1) 1000 m² for any construction-phase stormwater generated as a result of work carried in out in an area shown as High Soil Erosion Risk on the Planning Maps; or		
		(2) two hectares in any other location; and		
		2. The concentration of total suspended solids in the discharge shall not exceed;		
		(1) 50g/m³ where the discharge is to any spring-fed river, Banks Peninsula river, or to a lake except when the background total suspended solids in the waterbody is greater than 50g/m³ in which case the Schedule 5 visual clarity standards shall apply; or		
		(2) 100g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m³ in which case the Schedule 5 visual clarity standards shall apply; and		
		3. The discharge does not result in an increase in the flow in the receiving waterbody at the point of discharge of more than 1% of a flood event with an Annual Exceedance Probability of 20% (one in five year event); and		
		4. The discharge is not from, into or onto contaminated or potentially contaminated land; and		
		5. The discharge does not contain any hazardous substance.		
		Comments		
		Stormwater will be disposed of during the construction phase of the project and discharged to land following treatment through erosion and sediment containment facilities.		
		1. Will not comply . The site is not identified as Soil Erosion Risk. The construction phase of the project will result in an area larger than two hectares disturbed at one time.		
		2. N/A. There is no proposed discharge of construction stormwater to water.		
		3. N/A. There is no proposed discharge of construction stormwater to water.		

Discretionary Activity may enter groundwater or surface water, or into a reticulated stormwater system, that does not meet one or more of the condition Rule 5.94A or Rule 5.94B is a restricted discretionary activity. The exercise of discretion is restricted to the following matters: 1. The actual and potential effects of the discharge on the quality of the surface water, aquatic ecosystems, Ngāi Tahu cult values; and 2. The actual and potential effects of the discharge on the quality and safety of human and animal drinking water; and 3. The actual and potential adverse environmental effects of the quantity of water to be discharged on the banks or bed waterbody or on its flood carrying capacity, and on the capacity of the network to convey that discharge; and			4. Complies. The Site does not contain land that is contaminated.
Activity may enter groundwater or surface water, or into a reticulated stormwater system, that does not meet one or more of the condition Rule 5.94A or Rule 5.94B is a restricted discretionary activity. The exercise of discretion is restricted to the following matters: 1. The actual and potential effects of the discharge on the quality of the surface water, aquatic ecosystems, Ngāi Tahu cult values; and 2. The actual and potential effects of the discharge on the quality and safety of human and animal drinking water; and 3. The actual and potential adverse environmental effects of the quantity of water to be discharged on the banks or bed waterbody or on its flood carrying capacity, and on the capacity of the network to convey that discharge; and			5. Complies. Any construction stormwater will not contain contamination be a hazardous substance.
Comments The proposal is unable to comply with Rule 5.94A.	5.94C	Discretionary	 The exercise of discretion is restricted to the following matters: The actual and potential effects of the discharge on the quality of the surface water, aquatic ecosystems, Ngāi Tahu cultura values; and The actual and potential effects of the discharge on the quality and safety of human and animal drinking water; and The actual and potential adverse environmental effects of the quantity of water to be discharged on the banks or bed of a waterbody or on its flood carrying capacity, and on the capacity of the network to convey that discharge; and The potential benefits of the activity to the applicant, the community and the environment. Comments

Post Construction-Phase Stormwater

Rule	Compliance	Comment
C		The discharge of stormwater into a river, lake, wetland or artificial watercourse or onto or into land in circumstances where a contaminant may enter a river, lake, wetland, or artificial watercourse is a permitted activity, provided the following conditions are met:
		1. The discharge is into a reticulated stormwater system and the discharger has obtained written permission from the system owner to discharge into the system; or
		2. The discharge is not into a reticulated stormwater system, and
		1. The discharge is not from, into or onto contaminated or potentially contaminated land; and
		2. The discharge is not into:
		(a) a water race, as defined in Section 5 of the Local Government Act 2002; or <u>and</u>
		(b) a wetland, unless the wetland is part of a lawfully established stormwater or wastewater treatment system; or and
		(c) a waterbody that is Natural State, unless the discharge was lawfully established before 1 November 2013; and

		3. The discharge does not result in an increase in the flow in the receiving waterbody at the point of discharge of more than 1% of a flood event with an Annual Exceedance Probability of 20% (one in five year event); and
		4. The discharge meets the water quality standards in Schedule 5 after reasonable mixing with the receiving waters, in accordance with Schedule 5; and
		5. The concentration of total suspended solids in the discharge shall not exceed:
		(a) 50 g/m³, where the discharge is to any spring-fed river, Banks Peninsula river, or to a lake except when the background total suspended solids in the waterbody is greater than 50 g/m³ in which case the Schedule 5 visual clarity standards shall apply; or
		(b) 100 g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100 g/m³ in which case the Schedule 5 visual clarity standards shall apply; and
		6. The discharge to water is not within a Group or Community Drinking-water Protection Zone as set out in Schedule 1; and
		7. The discharge does not occur where there is an available reticulated stormwater system.
		Comments
		N/A. The proposal will not result in the discharge of stormwater from the construction activities directly to a watercourse. Appropriate systems will be utilised to ensure that contaminants such as sediment are removed from the water before discharge.
5.96	Complies	The discharge of stormwater onto or into land where contaminants may enter groundwater is a permitted activity, provided the following conditions are met:
		1. The discharge is into a reticulated stormwater system and the discharger has obtained written permission from the system owner to discharge into the system; or
		2. The discharge is not into a reticulated stormwater system, and
		1. The discharge is not from, into or onto contaminated or potentially contaminated land
		2. The discharge:
		(a) does not cause stormwater from up to and including a 24 hour duration $\frac{2\%10\%}{2}$ Annual Exceedance Probability rainfall event to enter any other property; and
		(b) does not result in the ponding of stormwater on the ground for more than 48 hours, unless <u>the pond is</u> part of the stormwater treatment system; and
		(c) is located at least 1 m above the seasonal high water table that can be reasonably inferred for the site at the time the discharge system is constructed; and

(d) is only from residentially zoned land	.land used	for residential	or rural	activities; and

(e) does not occur where there is an available reticulated stormwater system; and

(f) is not from a system that collects and discharges stormwater from more than five sites.

Comments

The proposal will result in the discharge of stormwater from the construction activities into land.

- 1. Complies. There will be no discharges from contaminated land.
- 2. a. Complies. The site will be managed to ensure stormwater controls are adequate to prevent inundation on another property.
 - b. Complies. The site will be managed to ensure stormwater is directed towards a stormwater treatment area and no ponding occurs on other areas within the Site.
 - c. Complies. Groundwater is understood to be in excess of 15 metres from the bottom of the construction zone.

Site Dewatering - Groundwater

Rule	Compliance	Comment
5.116	Does Not Comply	The taking and using of water from a river, lake or an artificial watercourse for infrastructure construction, maintenance and repair is a permitted activity, provided the following conditions are met:
		1. The take and use does not exceed 15 L/s and 100 m3 per day; and
		2. The take and use is for no longer than 2 months; and
		3. The take does not at any time exceed 10% of the flow at the point of take; and
		4. Where the take is from a water body with a minimum flow set in Sections 6 to 15, the take or diversion ceases when the flow is at or below the minimum flow, as measured estimated by the Canterbury Regional Council; and
		5. The take is not from a wetland; and
		6. Fish are prevented from entering the water intake as set out in Schedule 2; and
		7. Where the take is from a water race, irrigation or hydro-electricity canal or storage facility, the abstractor holds a current written agreement with the holder of the resource consents for the taking or diversion of water into the canal or storage facility; and
		8. The take is not from any river or part of a river that is subject to a Water Conservation Order.

The provision is relevant in terms of the proposed water take from the RDR for dust supression and concrete batching during construction.

- 1. **Will not comply**. Section 2.1 of the MWH Construction Methodology Report identifies that 0.5 cumecs (500 L/s) will be required from the existing RDR supply for construction activities. This water will be stored in a separate storage pond. No additional water take is proposed for construction activities.
- 2. **Will not comply**. The take of water from the RDR for construction purposes will exceed two months (could be for up to five years).
- 3. Complies. The rate of flow of the RDR at the point of abstraction is 30.7¹ cumecs and the proposed rate of abstraction is 0.5 cumecs or 1.6 per cent.
- 4. N/A. Take is not from a surface water body.
- 5. N/A. Take is not from a wetland.
- 6. Complies. Proposed abstraction point from the RDR is downstream of existing fish screening devices.
- 7. Complies. RDRML is the owner of the RDR and provides themselves written approval for the abstraction.
- 3. N/A. Take is not from a river.

Site Dewatering - Groundwater

Rule	Compliance	Comment
5.119	Does Not Comply	The taking of water from groundwater for the purpose of de-watering for carrying out excavation, construction, maintenance and geotechnical testing and the associated use and discharge of that water is a permitted activity, provided the following conditions are met: 1. The take continues only for the time required to carry out the work but the take shall not last for a period exceeding 6 months; and 2. The abstraction is not from a site where an activity or industry listed in Schedule 3 has occurred or is occurring; The take or discharge is not from, into, or onto contaminated or potentially contaminated land; and 3. The take does not lower the groundwater level more than 8 m below the ground level of the site or cause subsidence of any other site; and 4. The take does not have a moderate, high or direct stream depletion effect on a surface waterbody, determined in accordance with Schedule 9, unless the abstracted groundwater is being discharged to the surface waterbody to which it is hydraulically
		site; and 4. The take does not have a moderate, high or direct stream depletion effect on a surface waterbody, determined in accordance

5.	An assessment of interference effects, undertaken in accordance with Schedule 12, does not show that any community, group or
	private drinking-water supply bore will be prevented from taking water; and
6.	At the point and time of any discharge to surface water, the rate of flow in the river or artificial watercourse is at least five times

- At the point and time of any discharge to surface water, the rate of flow in the river or artificial watercourse is at least five time. the rate of the discharge; and
- 7. The concentration of total suspended solids in any discharge to a surface waterbody does not exceed:
 - (1) 50 g/m3 where the discharge is to any Spring-fed river, Banks Peninsula river, or to a lake or wetland; or
 - (2) 100 g/m3 where the discharge is to any other river or to an artificial watercourse; and
- 7A. The discharge after reasonable mixing with the receiving waterbody meets the visual clarity standards in Schedule 5; and
- 8. The <u>point of</u> discharge is not within a Group or Community Drinking-water Protection Zone as set out in Schedule 1.

Introduces new conditions 2, 7A and amended conditions 7 and 8.

The proposed works require several new flow control structures to be constructed in and adjacent to groundwater sources (the RDR race and the Rangitata River). Groundwater will therefore need to be extracted in order to lower the water tables and allow for construction at depth.

- 1. **Will not comply**. The dewatering of groundwater to facilitate the construction of the Lower Terrace Ecological Refuge may be in place for a period exceeding 6 months.
- 2. Complies. There is no contaminated or potentially contaminated land in the vicinity of the dewatering activities.
- 7. Complies. Refer to the Construction Methodology Report. Discharged water will be controlled to ensure that the concentration of suspended solids is within the applicable limits.
- 7A. Complies. Only the dewatering of the existing RDR canal will result in a discharge directly to a water source, being the canal itself. The discharge in that instance will contain limited contaminants and as such comply with the standard following reasonable mixing.
- 3. Complies. The point of discharge is not within a Group or Community Drinking-Water Supply Protection Zone.

Take and Use Surface Water

Rule	Compliance	Comment
5.123	Restricted	The taking and use of surface water from a river or lake is a restricted discretionary activity, provided the following conditions are met:
	Discretionary Activity	1. Unless the proposed take is the replacement of a lawfully established activity affected by the provisions of section 124-124C of the RMA, the take, in addition to all existing consented takes, does not result in any exceedance of any environmental flow or allocation limit or rate of take or seasonal or annual volume limits set in Sections 6 to 15 for that surface waterbody; and
		2. Unless the proposed take is the replacement of a lawfully established take affected by the provisions of section 124-124C of the RMA, if no limits are set in Sections 6 to 15 for that surface waterbody, the take, both singularly and in addition to all existing

		consented takes meets a flow regime with a minimum flow of 50% of the 7-day mean annual low flow (7DMALF) as calculated estimated by the CRC and an allocation limit of 20% of the 7DMALF; and 3. Unless it is associated with the artificial opening of a hāpua, lagoon or coastal lake to the sea, the take is not from a wetland, hāpua or a high naturalness river or high naturalness lake that is listed in Sections 6 to 15. Comments 1. Complies. The proposal is not seeking to increase the consented water take for normal operation. The proposed take is during periods of flood flow and as such the limits of Section 13 are able to be met.
		2. N/A. 3. N/A
Structures	;	
Rule	Compliance	Comment
5.135	N/A	The placement, use, alterationing, reconstruction, maintenance or removal of pipes, ducts, cables or wires over the bed of a lake or river, whether attached to a structure or not, and associated support structures is a permitted activity, provided the following conditions are met:
		1. The pipes, ducts, cables or wires and associated support structures do not prevent access to or over the bed or to lawfully established structures or defences against water; and
		2. The activity is not undertaken in, on, or over the bed of any river or lake listed as a high naturalness waterbody in Sections 6 to 15, unless the pipes, ducts, cables or wires are attached to an existing structure; and
		3. The pipes, ducts, cables or wires and associated support structures do not obstruct or alter navigation of the lake or river or reduce the flood carrying capacity of the waterway.
		Comments
		N/A. There are no pipes, ducts, cables or wires proposed over the bed of the river.
5.136	Does Not Comply	The drilling, tunnelling, or disturbance in or under the bed of a lake or river and the installation, maintenance, or removal of pipes, ducts, cables or wires is a permitted activity, provided the following conditions are met:
		1. The activity is not undertaken in, on, or under the bed of a lake listed as a high naturalness lake in Sections 6 to 15 or in an inanga or salmon spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the inanga spawning season of 1 March to 1 June inclusive; and
		2. The activity does not involve the deposition of any substance, other than bed material, on the bed of a lake or river; and
		3. The activity is undertaken at a distance greater than 10 m from any dam, weir, bridge, or network utility pole, pylon or flood

		 protection vegetation, or 150 m from any water level recorder, or 50 m from any defence against water, or closer where there is evidence that permission has been obtained from the owner of the infrastructure or the works are being carried out by or on behalf of the owner; and 4. Within 30 days of the completion of the activity the bed of the lake or river is returned to its original contour; and 5. Marker posts are erected for the lifetime of the pipes, ducts, cables or wires; and 6. The works do not occur in flowing water.
		Comments
		 The construction of the sluice channel and fish bypass outlet will result in disturbance of the bed of the Rangitata River. Complies. The proposal is not in a site listed in Section 17 or an inanga spawning habitat. Will not comply. The sluice channel and fish bypass return will be constructed of material other than bed material. Complies. There is currently no infrastructure within the location of the proposed works. Will not comply. The structures are proposed to remain in place. Complies. No pipes, ducts, cables or wires are proposed as part of the work. The structures will be marked. Will not comply. As outlined in the Construction Methodology Report, the works will be undertaken so as to avoid works within flowing water. However, limited works may be required in flowing water where the structures integrate with the river channel.
5.141	Does Not Comply	Temporary discharges to water or to land in circumstances where a contaminant may enter water associated with undertaking activities in Rules 5.135 to 5.140A or in relation to artificial watercourses are permitted activities, provided the following conditions are met:
		1. The discharge is only of sediment, organic material and water originating from within the bed of the lake or river; and
		2. The discharge is not undertaken in an inanga or salmon spawning site listed in Schedule 17, or <u>undertaken in any inanga</u> spawning habitat during the inanga spawning season of 1 March to 1 June inclusive; and
		3. The discharge is not for more than ten hours in any 24-hour period, and not more than 40 hours in total in any calendar month.
		Comments
		The provisions are relevant to the construction of the sluice channel and fish bypass outlet at the point of connection with the Rangitata River.
		1. Complies. The construction of the sluice channel and fish bypass outlet may result in the discharge of sediment from the river bed into water.
		2. Complies. The site is not identified in Schedule 17.
		3. Will not comply. The Construction Management Plan will ensure that construction of structures in the river will be managed to minimise the disturbance and discharge of material from the riverbed. However, the construction of the structures may exceed

		the time period identified.
5.141A	Discretionary Activity	The placement, installation, erection, reconstruction, alteration or removal of any structure, excluding dams, on, in or under the bed of a lake or river, and including any associated excavation, disturbance, diversion and discharge in the bed of a lake or river that does not comply with Rules 5.135 to 5.141 is a discretionary activity.
		Comments
		The proposal does not comply with Rules 5.136 and 5.141.
Refuelling	in Lake and Riverbe	ds
Rule	Compliance	Comment
5.145	Complies	The <u>use of land for the</u> refuelling of vehicles or equipment in the bed of a lake or river is a permitted activity, provided the following conditions are met:
		1. The refuelling of machinery does not take place over the wet bed of a river or lake, or in any area where spills may enter surface water; and
		2. All refuelling and bulk deliveries are directly supervised by the equipment operator; and
		3. All mobile plant is refuelled in a designated area, <u>Refuelling occurs</u> on an impermeable <u>surface</u> base away from drains or watercourses and if not, drip trays are used; and
		4. All non-mobile plant has a drip trays or other spill-containment <u>equipment</u> installed.
		Comments
		No refuelling of vehicles or equipment is proposed in the bed of the river.
Gravel fro	om Lakes and River B	eds
Rule	Compliance	Comment
5.148	N/A	The extraction of gravel from the bed of a lake or river including the deposition of substances on the bed and excavation or other disturbance of the bed of a lake or river is a permitted activity, provided the following conditions are met:
		1. The activity is not undertaken in, on, or under the bed of any river or lake listed as a high naturalness waterbody in Sections 6 to 15; and
		2. No part of the activity occurs within flowing water; and
		3. The activity does not include the deposition of any substance, other than bed material, on the bed; and
		4. The volume excavated by any person or on behalf of any person, organisation or corporation:
		(a) in the bed of any river or lake does not exceed 5 m³ in any 12 consecutive months; or

- (b) between 1 February and 31 August, in the beds listed in Schedule 14, does not exceed 5 m³ per month and not more than 10 m³ in any 12 consecutive months period; or
- (c) between 1 February and 31 August, in the beds listed in Schedule 15, does not exceed 10 m^3 per month and not more than 20 m^3 in any 12 consecutive months period; and
- 5. Any excavated material (other than surplus or reject material) is removed from the bed within 10 days of the material being excavated; and
- 6. Unless undertaken by the network utility operator responsible owner of for the structure, or written permission from the owner of the structure has been obtained, the activity is undertaken more than 50 m from any lawfully established dam, weir, culvert crossing, bridge, surface water intake plant or network utility pole or pylon, more than 150 m from any lawfully established water level recorder and more than 5-7.5m of from any existing defences against water; and
- 7. The activity and any associated equipment, materials or debris does not obstruct or alter access to or the navigation of the lake or river; and
- 8. The activity does not include screening or any other processing of the gravel within the bed of the lake or river; and
- 9. The activity is not undertaken in an inanga or salmon spawning site listed in Schedule 17, or in any inanga spawning habitat during the inanga spawning season of 1 March to 1 June inclusive; and
- 10. Excavation shall not occur within 100 metres of birds which are nesting or rearing their young in the bed of the river.

N/A. It is not proposed to extract gravel from the Rangitata River. It is noted that the construction of the sluice channel, wetland and fish return outlet will result in construction activities on the bed of the Rangitata River. Consideration of these activities is provided through Rule 5.136.

Dams and Damming

Rule	Compliance	Comment
5.154	Does Not Comply	The damming of water in the bed of a river and the constructing, using, altering, maintaining and operating of dam structures within
		the bed of a river, and the use of land to store water, including any associated damming or impounding of water outside the bed of a
		river or natural lake is a permitted activity, provided the following conditions are met:
		1. For the damming or impounding of water outside the bed of a river or natural lake:
		(a) the volume of water impounded is less than 20,000 m³; or
		(b) the maximum depth of water impounded above ground level (measured as the maximum vertical distance between the crest of the dam and the ground level immediately adjacent to the dam) is less than $\frac{3}{4}$ 4m; and

		(c) if the volume of water impounded is greater than 1,000 m³, the design and construction of the dam is certified by a Recognised Engineer; and
		(d) the land is not contaminated or potentially contaminated; and
		2. For the damming of water in the bed of a river and the constructing, altering, using, maintaining and operating of dam structures within the bed of a river:
		(a) The volume of water impounded is less than 5,000 m³; and
		(b) The maximum depth of water is less than 3 m; and
		(c) The dam does not impound the full flow of the river; and
		(d) Any existing passage of fish is not impeded; and
		(e) The damming of water does not cause water flow to fail to meet any limits in Sections 6 to 15 or fall below the minimum flow for the surface waterbody if the waterbody is subject to a minimum flow as set out in Sections 6 to 15; and
		(f) The dam is not located in a river listed as a high naturalness river in Sections 6 to 15 or in the mainstem of any river; and
		(g) The damming does not prevent water being taken by any domestic or stock water supply, or reduce the reliability of supply of any existing legally authorised water take.
		Comments
		This rule is applicable to the construction of the storage pond. There is no storage proposed within the bed of the river. 1. a. Will not comply. The proposed pond is designed to store 53million m ³ of water.
		b. Will not comply. The maximum depth of water is 24 metres.c. Complies. The proposal has been designed by a suitably qualified and experienced engineer.
		d. Complies. Site investigations have concluded that the land is not contaminated.
5.155	Discretionary Activity	The damming of water in the bed of a river and the constructing, using, altering, maintaining and operating of dam structures within the bed of a river, and the use of land to store water, including any associated damming of water outside the bed of a river or natural lake that does not meet one or more of the conditions of Rule 5.154 is a discretionary activity, provided the following conditions are met:
		1. The damming of water does not result in downstream river flows less than any minimum flow limit set in Sections 6-15 or, where applicable, the default rules on minimum flow limits in Rule 5.123(2); and
		2. Any new dam is not located in a river listed as an high naturalness waterbody in Sections 6 to 15 or in the mainstem of any river; and
		3. The damming does not prevent water being taken by any domestic or stock water supply, or reduce the reliability of supply of any

		existing legally authorised water take.
		Comments
		 Complies. The proposal will not result in an additional water take beyond the existing consented level for normal water flows and as such will not impact on the applicable minimum flow rates. Complies. No dam works are proposed within the river. This section of the Rangitata River is not listed as a high naturalness waterbody. Complies. No additional water takes from normal flows are proposed.
Vegetation	n in Lake and River B	Beds
Rule	Compliance	Comments
5.163	Complies	The introduction or planting of any plant, or the removal and disturbance of existing vegetation in, on or under the bed of a lake or river and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a permitted activity, provided the following conditions are met:
		1. The activity does not prevent access to lawfully established structures, including flood protection works, or to flood control vegetation; and
		2. No vegetation used for flood control or bank stabilisation is disturbed, removed, damaged or destroyed-except by or on behalf without the prior written permission of the person or agency responsible for maintaining that vegetation for flood control purposes; and
		3. No woody vegetation is disposed of in, on, over or under the bed of a lake or river other than for in situ decomposition of sprayed weeds that were growing in, on, over or under the bed; and
		4. Introduction or planting of vegetation in, on, or under the bed of any lake or river is not of a species listed in the Biosecurity NZ Register of Unwanted Organisms or the Canterbury Pest Management Strategy; and
l		5. Introduction or planting of vegetation in, on, or under the bed of any river or lake listed as a high naturalness waterbody in Section 6 to 15 is only of indigenous plant species that naturally occur in the catchment; and
		6. The disturbance, removal, damage or destroying of any plant or vegetation Vegetation clearance in, on, or under the bed of any river or lake listed as a high naturalness waterbody in Sections 6 to 15 is only of:
		(a) non-indigenous species; or
		(b) indigenous species that form the understorey of plantation forest that is being harvested and a minimum 5 m set back from the river or lake is provided upon replanting (if replanting occurs); and
		7. Except for clearance around utilities or existing structures, removal of a species listed in the Biosecurity NZ Register of Unwanted Organisms or the Canterbury Pest Management Strategy, or clearance for the purposes of maintaining existing fence lines,

- vehicle tracks, firebreaks, drains, ponds, dams or crossings, the activity Vegetation clearance does not occur in an inanga or salmon spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the period of 1 January to 1 June inclusive; and
- 8. In a flood control rating district scheme area, the introduction or planting of any plant, is by or on behalf has the prior written permission of the person or agency responsible for maintaining that vegetation for flood control purposes; and
- 9. <u>From 5 September 2015, and within the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki</u> rivers the vegetation clearance does not result in a reduction in the area or diversity of existing riverbed vegetation; and
- 10. Except in relation to recovery activities, or the establishment, maintenance or repair of network utilities and fencing, the concentration of total suspended solids in the discharge does not exceed:
 - (1) 50g/m³ where the discharge is to any Spring-fed river, Banks Peninsula River, or to a lake, except when the background total suspended solids in the waterbody is greater than 50g/m³ in which case the Schedule 5 visual clarity standards shall apply; or
 - (2) 100g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m³ in which case the Schedule 5 visual clarity standards shall apply.

There may be some removal or disturbing of vegetation on the river bed associated with the construction of the sluice channel, wetland and the fish bypass outlet.

- 1. Complies. There are no existing structures in the proposed location of works.
- 2. Complies. There are no flood control or bank stabilisation works in the proposed location of works.
- 3. Complies. No vegetation will be disposed of in this way.
- 4. Complies. All planting of vegetation within the bed of the river will be indigenous species and not from either list.
- 5. Complies. The site is not identified as a high naturalness water body.
- 6. Complies. The site is not identified as a high naturalness water body.
- 7. Complies. The site is not listed in Schedule 17 or an inanga spawning habitat.
- 8. Complies. The site is not within a flood control rating district scheme area.
- 9. Complies. The proposed vegetation clearance is minimal and will not result in a reduction in diversity of existing riverbed vegetation. The Proposed wetland will increase the biodiversity significantly from current levels.
- 10. Complies. Limited sediment discharge will be required during the construction activities.

Earthworks and Vegetation Clearance in Riparian Areas

Rule	Compliance	Comment
5.167	Complies	The use of land for vegetation clearance outside the bed of a river or lake or adjacent to a wetland boundary but within:
		(a) 10 m of the bed of a lake or river or a wetland boundary in Hill and High Country land or land shown as High Soil Erosion Risk on the Planning Maps; or
		(b) 5 m of the bed of a lake or river or a wetland boundary in all other land not shown as High Soil Erosion Risk on the Planning Maps or defined as Hill and High Country on the Planning Maps;
		and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a permitted activity, provided the following conditions are met:
		1. Except in relation to recovery activities, the area of bare ground resulting from vegetation clearance:
		(a) Does not exceed 10% of the area within the relevant setback distance in any site riparian margin at any time; or
		(b) Is undertaken in accordance with a Farm Environment Plan that has been prepared in accordance with Schedule 7 Part A; or
		(c) For plantation forestry activities is undertaken in accordance with the Environmental Code of Practice for Plantation Forestry (ECOP) 2007; and
		2. Except in relation to recovery activities, the vegetation clearance is not on land above 900 m above sea level; and
		2A. Except in relation to recovery activities, or the establishment, maintenance or repair of network utilities and fencing, the concentration of total suspended solids in the discharge does not exceed:
		(a) 50g/m3 where the discharge is to any Spring-fed river, Banks Peninsula River, or to a lake, except when the background
		total suspended solids in the waterbody is greater than 50g/m3 in which case the Schedule 5 visual clarity standards shall apply; or
		(b) 100g/m3 where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m3 in which case the Schedule 5 visual clarity standards shall apply; and.
		3. The felling of trees, or any part of a tree, is away from any lake, river or wetland, except where it is not practicable to do so to ensure human safety, and no logs or tree trunks are dragged through or across the bed of a lake or a permanently flowing river, or a wetland; and
		4. The vegetation clearance does not occur adjacent to a salmon or an inanga spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the period of 1 January to 1 June inclusive; and
		5. The vegetation is not flood or erosion control vegetation; and

		 6. From 5 September 2015, and within the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki rivers the vegetation clearance does not result in a reduction in the area or diversity of existing riparian vegetation, unless the earthworks have been authorised by a land use consent granted by the relevant territorial authority and conditions 1 to 5 above are also met. Comments There will be limited vegetation clearance adjacent to the Rangitata River associated with the construction of the sluice channel, wetland and the fish bypass outlet. The area is not identified as Hill and High Country Land or High Soil Erosion Risk.
		 a. Complies. The construction works are to a defined area and will be within the limits identified. b. N/A. c. N/A. Complies. The site is not above 900m. Complies. Limited sediment discharge will be required during the construction activities. Complies. Should any trees be required to be felled, construction management practices will ensure that no vegetation enters the waterway.
		 Complies. This site is not listed in Schedule 17 or an inanga spawning habitat. Complies. There is no flood or erosion control vegetation in the vicinity of the proposed works. Complies. The proposed vegetation clearance is minimal and the establishment of the wetland will result in a significant increase
5.168	Complies	in diversity of riverbed vegetation. The use of land for earthworks outside the bed of a river or lake or adjacent to a wetland boundary but within:
5.108	Compiles	(a) 10 m of the bed of a lake or river or a wetland boundary in Hill and High Country land or land shown as High Soil Erosion Risk on the Planning Maps; or
		(b) 5 m of the bed of a lake or river or a wetland boundary in all other land not shown as High Soil Erosion Risk on the Planning Maps or defined as Hill and High Country;
		and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a permitted activity provided the following conditions are met:
		1. Except in relation to recovery activities, or the establishment, maintenance or repair of network utilities and fencing, the extent of earthworks within the <u>riparian margin</u> relevant setback distances in any property:
		(a) does not at any time exceed:
		(i) an area of 500 m2, or 10% of the area, whichever is the lesser; or
		(i) a volume of 10m3 on land shown as High Soil Erosion Risk on the Planning Maps; or

- (b) Is undertaken in accordance with a Farm Environment Plan that has been prepared in accordance with Schedule 7 Part A; or
- (c) For plantation forestry activities is undertaken in accordance with the Environmental Code of Practice for Plantation Forestry (ECOP) 2007 and the NZ Forest Road Engineering Manual (2012); and
- 2. Except in relation to recovery activities or the establishment, maintenance or repair of network utilities and fencing, the concentration of total suspended solids in the discharge does not exceed any discharge of sediment associated with the activity into the water in a river, lake, or the Coastal Marine Area does not exceed 8 hours in any 24 hour period, and does not exceed 24 hours in total in any 6 month period; and
 - (1) 50g/m3 where the discharge is to any Spring-fed river, Banks Peninsula River, or to a lake, except when the background total suspended solids in the waterbody is greater than 50g/m3 in which case the Schedule 5 visual clarity standards shall apply; or
 - (2) 100g/m3 where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m3 in which case the Schedule 5 visual clarity standards shall apply; and.
- 3. The activity does not occur adjacent to a significant spawning reach for salmon or an inanga spawning <u>site</u> area listed in Schedule 17; or in any inanga spawning habitat during the period of 1 January to 1 June inclusive; and
- 4. Except in relation to recovery activities or the establishment, maintenance or repair of network utilities and fencing, any earthworks or cultivation is not within 5 m of any flood control structure; and
- 5. From 5 September 2015, and within the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki rivers the earthworks do not result in a reduction in the area or diversity of existing riparian vegetation, unless the earthworks have been authorised by a land use consent granted by the relevant territorial authority and conditions 1 to 4 above are met.

There will be limited earthworks adjacent to the Rangitata River associated with the construction of the sluice channel, lower terrace restoration area and the fish bypass outlet. The area is not identified as Hill and High Country Land or High Soil Erosion Risk.

- 1. a. Complies. The sluice channel structure consists of a rock armoured channel up to 40 metres wide. Earthworks associated with its construction are likely to exceed 500m². In addition to this, the proposed wetland will result in the excavation of material. The site is not within a High Soil Erosion Risk area.
 - b. N/A.
 - c. N/A
- 2. Complies. Limited sediment discharge will be required during the construction activities.
- 3. Complies. This section of the Rangitata River is not listed in Schedule 17 or an inanga spawning habitat.

		A Complies There are no Flood Control Chrystynes in the location of the group and groups	
		4. Complies. There are no Flood Control Structures in the location of the proposed works.	
		5. Complies. The proposed vegetation clearance is minimal and the establishment of the wetland will result in a significant increase in diversity of riverbed vegetation.	
Earthwor	Earthworks over Aquifers		
Rule	Rule	Rule	
5.176	Restricted Discretionary	The use of land to excavate material that does not comply with one or more of the conditions of Rule 5.175 is a restricted discretionary activity.	
	Activity	The exercise of discretion is restricted to the following matters:	
		1. The actual and potential adverse environmental effects on the quality of water in aquifers, rivers, lakes, wetlands or the sea; and	
		2. Any need for remediation or long-term treatment of the excavation; and	
		3. The protection of the confining layer and maintaining levels and groundwater pressures in any confined aquifer, including any alternative methods or locations for the excavation; and	
		4. The management of any exposed groundwater.	
		Comments	
		The Proposal is unable to comply with Rule 5.175.	

Note changes to Schedule 5:

Schedule 5 Mixing Zones and Receiving Water Standards

Mixing Zones

The area (and underlying volume) of a receiving water where the water quality standards specified for rivers, artificial watercourses and lakes do not have to be met is referred to as the Mixing Zone.

The Mixing Zone, as a result of a point source discharge of a contaminant, is:

- 1. For river and artificial watercourse locations with flowing water present at all times;
 - (a) no longer than 200 m along the longest axis of the zone, and
 - (b) occupies no greater than two-thirds of the wetted channel width1 at the estimated 7DMALF2 for that location; and
 - (c) no longer than 10 times the wetted channel width1 at the estimated 7DMALF2 for that location.
- 2. For river and artificial watercourse locations, with intermittent flows, no longer than 20 m at times of flow and 0 m at no flow;
- For lake locations:
 - (a) if the discharge location is within 50 m of the lake water edge3 at any time, a circle with a diameter of 50 m; or
 - (b) if the discharge location is greater than 50 m from the lake water edge3 at all times, a circle with a diameter of 100 m; and
- 4. When within a Group or D Community Drinking-water Protection Zone, as set out in Schedule 1, 0 m.

Notes:

- 1. The wetted channel width is estimated by a suitably experienced and qualified person for the proposed discharge location. For a braided river the wetted channel width is the width of water in the braid receiving the discharge.
- 2. The 7DMALF for a specific location is estimated using a generally accepted calculation method undertaken by a suitably experienced and qualified person.
- 3. The lake water edge is estimated by a suitably experienced and qualified person for the proposed discharge location at the lowest lake level with a ten year reoccurrence interval.