

CRC182536: For a non-consumptive take of up to 5 cumecs of water from the Rangitata River associated with the operation of a fish screen;

1	Water diverted from the Rangitata River <u>at surface water abstraction point SWAP J36/0020</u> shall: <ul style="list-style-type: none"> a. Not exceed a diversion rate of 5 m³/s; b. Be diverted for the purposes of operating a fish bypass at or about map reference NZTM2000: 1458480 mE 5151553 mN map reference; and c. Be discharged in accordance with consent CRC182535 or any subsequent replacement.
1A	The Proposal diversion shall be constructed, operated and maintained in accordance with the details contained within the following documents: a. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in July 2016 and entitled "Lake Klondyke: A Proposed Water Storage Facility, Assessment of Environmental Effects Report & Resource Consent Application, Prepared for the Rangitata Diversion Race Management Limited, Date Finalised: July 2016"; and b. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in November 2017 and entitled "Proposed Rangitata Diversion Race Fish Screen and Supplementary Matters Resource Consent Application". <u>except where modified by specific conditions set out in these this resource consents or by the plans authorised by the building consent for the Proposal.</u>
2	Notwithstanding condition (1)(a), whenever: <ul style="list-style-type: none"> a. The mean flow in the Rangitata River <u>for the 24-hour period ending at noon on any one day</u> falls below 132.6 m³/s, the diversion of water from the Rangitata River in accordance with this consent shall not exceed 3 m³/s; b. The mean flow in the Rangitata River <u>for the 24-hour period ending at noon on any one day</u> is between 132.6 m³/s and 142.6 m³/s, the diversion of water from the Rangitata River in accordance with this consent shall not exceed 4 m³/s; and c. The mean flow in the Rangitata River <u>for the 24-hour period ending at noon on any one day</u> is above 142.6 m³/s, the diversion of water from the Rangitata River in accordance with this consent shall not exceed 5 m³/s.
3	The flows referred to in condition (2) shall be the flow estimated by the Canterbury Regional Council in the Rangitata River at the Klondyke recorder site at map reference NZTM2000: 1456739 mE 5153169 mN.
4	The consent holder shall before the first exercise of this consent: <ul style="list-style-type: none"> a. <ul style="list-style-type: none"> i. install a water meter(s) that has an international accreditation or equivalent New Zealand calibration endorsement, and has pulse output, suitable for use with an electronic recording device, which will measure the rate and the volume of water taken to within an accuracy of plus or minus five ten percent as part of the pump-outlet plumbing, or within the mainline distribution system, at a location(s) that will ensure the total take of water is measured; and ii. install a tamper-proof electronic recording device such as a data logger(s) that shall time stamp a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least one season's data of water taken as specified in clauses (b)(i) and (b)(ii), or which is telemetered, as specified in clause (b)(iii). b. The recording device(s) shall: <ul style="list-style-type: none"> i. be set to wrap the data from the measuring device(s) such that the oldest data will be automatically overwritten by the newest data (i.e.

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Whenever water is being taken into the RDR, 5m³/s of water shall be taken for operation of the bypass, unless
a. a lesser volume of water is being taken for the purposes of testing operation or the bypass in accordance with conditions 9A and 10 of CRC182542, or
b. monitoring undertaken in accordance with conditions 9A and 10 of CRC182542 demonstrate, to the satisfaction of the Canterbury Regional Council, effectiveness of the fish bypass in attracting and conveying fish at a flows less than 5m³/s.

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	<p>cyclic recording); and</p> <p>ii. store the entire season's data in each 12 month period from 1 July to 30 June in the following year, which the consent holder shall then download and store in a commonly used format and provide to the Canterbury Regional Council upon request in a form and to a standard specified in writing by the Canterbury Regional Council; or</p> <p>iii. shall be connected to a telemetry system which collects and stores all of the data continuously with an independent network provider who will make that data available in a commonly used format at all times to the Canterbury Regional Council and the consent holder.</p> <p>iv. No data in the recording device(s) shall be deliberately changed or deleted.</p> <p>d. The water meter and recording device(s) shall be accessible to the Canterbury Regional Council at all times for inspection and/or data retrieval.</p> <p>e. The water meter and recording device(s) shall be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.</p> <p>f. All practicable measures shall be taken to ensure that the water meter and recording device(s) are fully functional at all times.</p>
5	<p>Within one month of the installation of the measuring or recording device(s), or any subsequent replacement measuring or recording device(s), and at five-yearly intervals thereafter, and at any time when requested by the Canterbury Regional Council, the consent holder shall provide a certificate to the Canterbury Regional Council, Attention: Regional Leader- Monitoring and Compliance, signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:</p> <p>a. The measuring and recording device(s) has been installed in accordance with the manufacturer's specifications; and</p> <p>b. Data from the recording device(s) can be readily accessed and/or retrieved in accordance with clauses (b) and (c) of condition (4).</p>
6	<p>The consent holder shall surrender consent CRC180974 prior to the first exercise of this consent.</p>
7	<p>Pursuant to Section 128(1) of the Resource Management Act 1991, the Consent Authority may serve notice of its intention to review the conditions of this consent within a period of three months commencing on each anniversary of the date of issue of the consent for any of the following purposes:</p> <p>a. To deal with any adverse effects on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or</p> <p>b. To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment; or</p> <p>c. To deal with any other adverse effect on the environment on which the exercise of the consent may have any influence.</p>
8	<p>The lapsing date for the purposes of Section 125 of the Resource Management Act 1991 shall be <u>153</u> years from the date consent is issued.</p> <p>Advice note: 'Exercised' is defined as implementing any requirements to operate this consent <u>and</u> undertaking the activity as described in these conditions and/or application documents.</p>
9	<p><u>This resource consent shall expire 35 years after it has commenced.</u></p>

CRC182535: to discharge water from the take authorised under CRC182536 and suspended sediment to the river via the fish bypass return;

1	The discharge shall only be water and sediment from the fish bypass channel authorised under Consent CRC182536, or any subsequent replacement consent.
1A	<p>The Proposal discharge shall be constructed, operated and maintained in accordance with the details contained within the following documents:</p> <p>a. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in July 2016 and entitled "Lake Klondyke: A Proposed Water Storage Facility, Assessment of Environmental Effects Report & Resource Consent Application, Prepared for the Rangitata Diversion Race Management Limited, Date Finalised: July 2016"; and</p> <p>b. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in November 2017 and entitled "Proposed Rangitata Diversion Race Fish Screen and Supplementary Matters Resource Consent Application".</p> <p>except where modified by specific conditions set out in these this resource consents or by the plans authorised by the building consent for the Proposal.</p>
2	<p>The discharge shall occur into the Rangitata River at or about map reference NZTM2000: 1458275 mE 5151564 mN.</p> <p>Water discharged to the Rangitata River from the bypass channel associated with the Fish Screen shall not exceed 5 m³/s and shall occur at or about map reference NZTM2000: 1458275 mE 5151564 mN.</p>
2A	<p>Water may only be discharged in accordance with condition 2 where the consent holder has surrendered resource consent CRC180975.</p> <p>The consent holder shall surrender consent CRC180974 prior to the first exercise of this consent.</p>
3	<p>Pursuant to Section 128(1) of the Resource Management Act 1991, the Consent Authority may serve notice of its intention to review the conditions of this consent within a period of three months commencing on each anniversary of the date of issue of the consent for any of the following purposes:</p> <ul style="list-style-type: none"> a. To deal with any adverse effects on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or b. To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment; or c. To deal with any other adverse effect on the environment on which the exercise of the consent may have any influence.
4	<p>The lapsing date for the purposes of Section 125 of the Resource Management Act 1991 shall be 453 years from the date consent is issued.</p> <p>Advice note: 'Exercised' is defined as implementing any requirements to operate this consent and undertaking the activity as described in these conditions and/or application documents.</p>
5	This resource consent shall expire 35 years after it has commenced.

CRC182542: to change conditions of CRC011237 to enable an alternative fish screen design consisting of ~~either~~ a Mechanical Rotary Fish Screen ~~or a permeable rockbund and infiltration gallery~~;

(note below text in italics represents the existing wording of CRC011237)

1	<p>The maximum rate at which water may be taken and diverted shall be 30.7 cubic metres per second (m³/s), such that the combined take with that from the South Ashburton River (CRC011245) does not exceed 35.4 cubic metres per second. Water shall be taken in accordance with the Water Abstraction Restriction Levels and minimum flow provisions outlined in the following tables:</p> <p>Permitted Rate of Water Abstraction for the period 1st September to 31st May:</p>				
	Flow (m ³ /s) at Klondyke	RDR	Other Irrigation	Other Stockwater	Residual Flow in River
	64.0 – 60.1	30.7	0.3	1.0	32.0 – 28.1
	60.0 – 50.1	26.2	0.3	1.0	32.5 – 22.6
	50.0 – 43.1	21.8	0.2	1.0	27.0 – 20.1
	43.0 – 40.1	18.9	0.1	1.0	23.0 – 20.1
	40.0 – 38.1	16.9	0.1	1.0	22.0 – 20.1
	38.0 – 36.1	14.9	0.1	1.0	22.0 – 20.1
	36.0 – 34.1	12.9	0.1	1.0	22.0 – 20.1
	34.0 – 32.1	10.9	0.1	1.0	22.0 – 20.1
	<p>Permitted Rate of Water Abstraction for the period 1st June to 31st August:</p>				
	Flow (m ³ /s) at Klondyke	RDR	Other Irrigation	Other Stockwater	Residual Flow in River
	Above 64	30.7	Nil	1.0	GT 32.3
	64 – 60.1	30.7	Nil	1.0	32.3 – 28.4
	60 – 50.1	26.5	Nil	1.0	32.5 – 22.6
	50 – 40.1	21.5	Nil	1.0	27.5 – 17.6
	40 – 38.1	22.0	Nil	1.0	17.0 – 15.1
	38 – 36.1	20.0	Nil	1.0	17.0 – 15.1
	36 – 34.1	18.0	Nil	1.0	17.0 – 15.1
	34 – 32.1	16.0	Nil	1.0	17.0 – 15.1

	32 – 30.1	14.0	Nil	1.0	17.0 – 15.1
2	The consent holder shall measure and record the rate at which water is taken and diverted at not greater than 30 minute intervals and shall make such records available to Canterbury Regional Council upon request.				
3	The consent holder shall, within six months of the commencement of this consent and thereafter maintain a notice at or about map reference NZMS 260 J36:678-144 warning of the dangers of swimming and boating close to the intake structure.				
4	The consent holder shall ensure that the rock weir does not significantly impede the passage of trout, salmon and native fish.				
5	<p>Until 1 August 2019201921, or when the replacement fish screen referred to in conditions (6) to (10) is fully operational, the consent holder shall take such measures as are appropriate to ensure that, so far as is reasonably practicable, juvenile salmon are excluded from the body of the diversion race and are returned to the river. To that end:</p> <ul style="list-style-type: none"> a. Within 18 months from the commencement of this consent the consent holder shall install and commission a Bio-acoustic Fish Guidance system for the purpose of diverting, as far as practicable, migrating salmon smolt to the Rangitata River. That system shall be generally as outlined in the evidence presented on 14 February 2003 by Charles Paul Mitchell, Consultant Biologist; b. Within three years of the commencement of this consent the consent holder shall provide the consent authority with a report, prepared by a person appropriately qualified and experienced in freshwater fisheries biology, detailing the extent to which the system referred to in paragraph (a) above is meeting the object of this condition and making recommendations, if such are thought by that person to be necessary, as to the way in which that object may better be met; c. At any time within the fourth year of this consent and during every fourth year thereafter the consent authority may review this condition (pursuant to section 128) for the purpose of determining what steps should be taken by the consent holder so as better to achieve the object of this condition; d. The consent holder may at any time apply to the consent authority for a change to this condition, but for the sole purpose of the better achievement of its object. 				
6	Prior to 1 August 2019 201921 , the consent holder shall construct a fish screen that shall be installed, operated and maintained on the intake to ensure that fish are prevented from entering any of the irrigation infrastructure downstream of the screen.				
7	<p>The fish screen referred to in condition (6) shall be designed to comply with the following design specifications as defined in NIWA (2007) Fish Screening: Good Practice Guidelines for Canterbury (hereafter referred to as the Good Practice Guidelines) and/or Schedule 2 of the Canterbury Land and Water Regional Plan or subsequent amendments specifically:</p> <ul style="list-style-type: none"> a. Location as close as practical to the Rangitata River; 				

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Commented [MOU4]: CSIFG amended wording: Prior to 1 August 2019, the consent holder shall construct a mechanical rotary fish screen that shall be installed, operated and maintained on the intake to ensure that fish are prevented from being lost from the Rangitata River.

	<p>b. Mesh screen size equal to or less than 3mm mesh (side of square) or 2mm slot width;</p> <p>c. An average approach <u>and/or</u> through screen velocity ($\pm 10\%$) of less than 0.12 m/s;</p> <p>d. The sweep velocity past the fish screen elements shall be greater than the approach velocity;</p> <p>e. A fish bypass channel shall be designed and operated that is effective in attracting and conveying fish away from the screens and down a bypass channel unharmed;</p> <p>f. Fish bypass channel is designed and operated for continuous flow connection back to a flowing braid of the Rangitata River;</p> <p>g. Screening materials shall not have sharp or protruding surfaces that could damage fish coming into contact with them; and</p> <p>h. An Operations and Maintenance programme that will ensure the screen meets the effectiveness criteria in the Good Practice Guidelines and specifically includes:</p> <ol style="list-style-type: none"> mechanisms to monitor and clean screening surfaces to ensure they do not become clogged with material; and a programme to monitor and detect any damage to screening surfaces, seals, and movement operation of the screens.
8	The fish <u>screen exclusion device</u> referred to in condition (6) shall be designed or supplied by a person with experience in freshwater ecology and fish screening techniques, who shall ensure that the design achieves the design criteria specified in conditions (6) and (7), and that the device is fully designed in accordance with the Good Practice Guidelines and/or Schedule 2 of the Land and Water Regional Plan <u>or subsequent amendments</u> .
9	Prior to the installation of the fish screen, a report containing final design plans that demonstrates how the fish screen will meet the performance criteria specified in conditions (6) and (7) of this consent, and an operation and maintenance plan for the fish screen, shall be provided to Canterbury Regional Council, Attention Regional Leader – Monitoring and Compliance.
9A	<p><u>Prior to the installation of the fish screen, a Fish Screen Management Plan (FSMP) shall be prepared by a suitably qualified and experienced fisheries ecologist with experience in salmonid and native fisheries and fish exclusion, in consultation with Central South Island Fish and Game. The Fish Screen Management Plan shall set out methods and timeframes for monitoring of the function and effectiveness of the fish screen and fish bypass to demonstrate compliance with conditions (6) and (7). The monitoring programme shall include:</u></p> <ol style="list-style-type: none"> <u>Methods to obtain field measurements to demonstrate velocities are being achieved as required by conditions 7(c) and (d);</u> <u>Methods to demonstrate the effectiveness of the fish bypass in attracting and conveying fish; and</u> <u>Methods and a programme for verifying, by way of live fish trials, ongoing compliance with condition (6) that includes the full migration season for out-migrating salmon (ie 1 August to 31 July).</u> <p><u>The FSMP shall also include the Operations and Management Plan required by condition 7(h).</u></p> <p><u>The FSMP shall be provided to Canterbury Regional Council, Attention Regional Leader – Monitoring and Compliance for certification that it has been prepared in accordance with this condition, copy to Central South Island Fish and Game, prior to commencement of construction.</u></p>
10	After installation of the fish screen referred to in condition (6), a certificate shall be supplied by a suitably qualified expert in freshwater ecology and fish screen

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b. Wedge wire bars with a 2mm slot width;
c. An maximum approach velocity of less than 0.12 m/s;
d. The sweep velocity past the fish screen elements shall be greater than the approach velocity and sufficient to result in an exposure time not exceeding 60 seconds;
e. A fish bypass channel shall be designed and operated that is effective in attracting and conveying fish away from the screens and down a bypass channel to the river unharmed;

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h. An Operations and Maintenance programme that will ensure the screen meets the effectiveness criteria in the Good Practice Guidelines and specifically includes:
i. mechanisms to monitor and clean screening surfaces to ensure they do not become clogged with material;
ii. a programme to monitor and detect any damage to screening surfaces, seals, and movement operation of the screens;
iii. Mechanisms to remediate any damage to address (ii) above, to ensure repairs occur within 48 hours; and
iv. A programme to undertake monitoring and maintenance of the fish bypass and fish bypass discharge point to achieve conditions (6) and 7(e) and (f).

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Prior to the installation of the fish screen, a report containing final design plans that demonstrates how the fish screen will meet the performance criteria specified in conditions (6) and (7) of this consent, and an operation and maintenance plan for the fish screen, shall be provided to Canterbury Regional Council, Attention Regional Leader – Monitoring and Compliance for certification prior to commencement of construction.

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	design stating that the fish screen has been installed and is operating in accordance with the design specifications, in accordance with conditions (6) and (7)). The certificate shall be provided to Canterbury Regional Council, Attention Regional Leader – Monitoring and Compliance no later than one month after the commissioning of the fish screen.
10A	<u>The consent holder shall monitor and, as necessary, maintain the discharge point of the fish bypass to ensure the passage of fish from the bypass return channel to the main river flow is not impeded.</u>
10AA	<u>Following implementation of any remedial action required by condition (10A), the consent holder shall repeat the action required by condition (10), until compliance with conditions (6) and (7) has been demonstrated.</u>
10B	<p><u>Pursuant to Section 128(1) of the Resource Management Act 1991, the Consent Authority may serve notice of its intention to review the conditions of this consent within a period of three months commencing on each anniversary of the date of issue of the consent for any of the following purposes:</u></p> <ol style="list-style-type: none"> <u>To deal with any adverse effects on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or</u> <u>To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment; or</u> <p><u>To deal with any other adverse effect on the environment on which the exercise of the consent may have any influence.</u></p>
11	The term of this consent shall be 35 years.

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After installation of the fish screen referred to in condition (6) monitoring shall be undertaken in accordance with the FSMP to demonstrate compliance with conditions (6) and (7). Monitoring shall be undertaken or supervised by an appropriately qualified and experienced fisheries ecologist with knowledge of salmonid and native fisheries and fish exclusion. The results of each stage of monitoring shall be provided to Canterbury Regional Council, Attention Regional Leader – Monitoring and Compliance and Central South Island Fish and Game within one month of completion.

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In the event that the monitoring undertaken in accordance with condition (10) demonstrates that the fish screen does not achieve conditions (6) or (7), the consent holder shall immediately commission a report. The report shall be prepared by an appropriately qualified and experienced fisheries ecologist with knowledge of salmonid and native fisheries and fish exclusion, in consultation with Central South Island Fish and Game. The report shall recommend remedial action to be undertaken by the consent holder in order for fish screen to achieve compliance with conditions (6) and (7) and timeframes for completion of that remedial action. The report shall be provided to the Canterbury Regional Council, Attention Regional Leader – Monitoring and Compliance for certification that it has been prepared in accordance with this condition, copy to Central South Island Fish and Game, no later than three months after completion of the monitoring which identified non-compliance. Once the report is certified by the Regional Council, the consent holder shall implement the recommended remedial action within the timeframes recommended in the report.
The consent holder shall monitor and, as necessary, maintain the discharge point of the fish bypass to ensure the passage of fish from the bypass return channel to the main river flow is not impeded.

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CRC182539: to extract gravel for the construction and periodic maintenance of the fish bypass outlet;

	<u>GLOSSARY OF TERMS & ABBREVIATIONS USED IN THIS RESOURCE CONSENT</u>
0	<p><u>Appropriately qualified and experienced expert(s)</u> means a person or persons:</p> <ul style="list-style-type: none"> a. <u>With a relevant and recognised tertiary qualification(s) to the topic being assessed;</u> b. <u>Whom is (are) recognised as a full member (or equivalent) of a relevant professional institution(s) (such as the Institution of Professional Engineers New Zealand), where such institutions exist;</u> c. <u>Has more than 10 years relevant experience in the topic being assessed;</u> <p><u>and</u></p> <p><u>Certifies and Certification</u> means a process whereby:</p> <ul style="list-style-type: none"> a. <u>The consent holder supplies a report, action plan, design plan, construction methodology, monitoring plan, commissioning plan, safety system or a management plan, and the Canterbury Regional Council appoints an appropriately qualified and experienced expert to assesses the documentation submitted to ensure that it achieves the requirements of the relevant condition(s) of consent;</u> b. <u>Should the documents supplied in accordance with condition 0(a), in the opinion of the expert appointed by the Council, achieve the intent of the relevant condition(s) of these resource consents, the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council shall issue a written certificate to the consent holder confirming that the requirements of the relevant condition(s) have been satisfied;</u> c. <u>If the expert appointed by the Council is not satisfied that the documents supplied in accordance with condition (a) achieves requirements of the relevant condition(s), the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council shall advise (in writing) the consent holder of the experts concerns and ask that the report, commissioning plan, monitoring plan, action plan, safety system or management plan be modified so as to address the concerns, and then be resubmitted;</u> d. <u>This process shall be repeated until the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council is able (on the advice of the expert) to certify that the requirements of the applicable condition(s) of consent have been satisfied; and</u> <p><u>CLG</u> means the Community Liaison Group;</p> <p><u>CMP</u> means Construction Management Plan.</p> <p><u>Construction site</u> includes all areas, excluding gazetted and vested road reserves that contain formed roads, where construction works / activities authorised by these resource consents are being undertaken by the consent holder.</p> <p><u>Council</u> means the Canterbury Regional Council.</p> <p><u>EAP</u> means the Emergency Action Plan.</p> <p><u>ESCP</u> means Erosion and Sediment Control Plan.</p> <p><u>Fish screen</u> means the rotary fish screen and its associated bypass channel.</p> <p><u>FSVMP</u> means Fish Screen Verification Monitoring Plan</p> <p><u>Flood flow take</u> means a flood flow abstraction from the Rangitata River.</p> <p><u>HSSMP</u> means the Hazardous Substances Spill Management Plan</p> <p><u>Klondyke Pond Dam</u> means the Lake Klondyke Water Storage Facility.</p> <p><u>km/hr</u> means kilometres per hour;</p> <p><u>l/s</u> means litres per second</p> <p><u>m³</u> means cubic metres</p> <p><u>m³/s</u> means cubic metres per second</p> <p><u>m</u> means metre</p> <p><u>m/s</u> means metres per second;</p> <p><u>mm/s</u> means millimetres per second</p> <p><u>NZSOLD</u> means New Zealand Society on Large Dams New Zealand.</p> <p><u>PPV</u> means Peak Particle Velocity</p>

	<p><u>Reasonable Mixing Zone means, for the purposes of condition 18.0A, a reasonable mixing zone extending from the point of discharge from the Sluice Channel to a point that is 200 metres downstream of the discharge point.</u></p> <p><u>Regional Water Table means the upper surface of the full saturated groundwater system but does not, for the purposes of these resource consents, include perched groundwater (which is groundwater in saturated strata that occurs above the regional water table but is separated from it by a layer of unsaturated strata).</u></p> <p><u>RDR means the Rangitata Diversion Race.</u></p> <p><u>RDR mods means the modifications to the Rangitata Diversion Race.</u></p> <p><u>RL means the right bank when looking downstream.</u></p> <p><u>RMA means the Resource Management Act</u></p> <p><u>The Proposal means the Klondyke Storage Dam-Pond, WWC, RDR modifications, fish screen, Shepherds Bush Road relocation, flood flow take and refuge, and all incidental work.</u></p> <p><u>TSP means total suspended particulate.</u></p> <p><u>WRMP means Works in the River Management Plan</u></p>
	<u>CERTIFICATION PROCESS</u>
0A	<p><u>Except where explicitly required otherwise by conditions of this consents, the consent holder shall:</u></p> <ol style="list-style-type: none"> <u>a. Engage an appropriately qualified and experienced independent expert (or experts) to prepare the management plans, design plans, construction methodology, monitoring plans, action plan, commissioning plan and safety system specified in the conditions of this consent using the draft versions of these plans (which are attached as Annexure B) as a base document;</u> <u>b. Provide drafts of each of the documents required by condition 0A(a) to the Canterbury Regional Council, Attention Regional Leader - Monitoring and Compliance, not less than three months prior to construction works / activities commencing in accordance with these resource consents;</u> <u>c. Not commence any construction works / activities authorised by these resource consents until it has received a certificate from the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council that the management plan, design plan, construction methodology, monitoring plan, action plan, commissioning plan or safety system is consistent with the applicable conditions of this consent;</u> <u>d. Adhere to and implement the certified version of the management plan, design plans, construction methodology, monitoring plan, action plan, commissioning plan or safety system;</u> <u>e. Submit any proposed variations to the management plans, design plans, construction methodology, action plan, safety system, monitoring plans and commissioning plan to the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council, at least seven days prior to when the proposed change will be implemented by the consent holder. Any variations made shall not take effect until the Regional Leader: Compliance & Monitoring of the Canterbury Regional Council certifies that the variations accord with the applicable conditions of the resource consent;</u> <u>f. Appoint an appropriately qualified and independent expert (or experts) to review the management plans, action plan, safety system, monitoring plans and commissioning plan at the frequency set out in these resource consents. Should the conditions of these resource consents not set a frequency, the reviews shall be conducted annually. Such reviews are to ensure that the management plans, action plan, safety system, monitoring plans and commissioning plan continue to achieve the conditions of these resource consents.</u> <u>g. Any changes made as a result of the reviews conducted in accordance with condition 0A(f) shall be submitted to the Canterbury Regional Council and shall not take effect until the Regional Leader: Compliance and</u>

	<p><u>Monitoring of the Canterbury Regional Council certifies that the changes accord with the applicable conditions of these resource consents;</u></p> <p><u>h. Pay the costs of the expert(s) appointed by the Canterbury Regional Council to certify the management plans, design plans, construction methodology, monitoring plans, commissioning plan, action plan and safety system (and any variations or changes thereto) in accordance with conditions OA(c) and OA(h); and</u></p> <p><u>i. Ensure that copies of the certified commissioning plan, design plans, construction methodology and management plans, monitoring plans, action plan, safety system and management plans set out in these conditions are available on site at all times during the construction works / activities authorised by this consent; and</u></p> <p><u>j. Ensure that all key personnel are to be made aware of the content and requirements / obligations of the management plans, action plan, safety system, commissioning plan and monitoring plans.</u></p>
	SCOPE
1	The activity shall be limited to the use of land to extract gravel for the construction and periodic maintenance of a fish bypass outlet. The works to be carried out shall be located at or about map reference NZTM2000: 1458275 mE 5151564 mN <u>and for maintenance activities up to 500 metres upstream and downstream of this point.</u>
1A	<p><u>The Proposal landuse shall be constructed, operated and maintained in accordance with the details contained within the following documents:</u></p> <p><u>a. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in July 2016 and entitled "Lake Klondyke: A Proposed Water Storage Facility, Assessment of Environmental Effects Report & Resource Consent Application, Prepared for the Rangitata Diversion Race Management Limited, Date Finalised: July 2016"; and</u></p> <p><u>b. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in November 2017 and entitled "Proposed Rangitata Diversion Race Fish Screen and Supplementary Matters Resource Consent Application".</u></p> <p><u>except where modified by specific conditions set out in these this resource consents or by the plans authorised by the building consent for the Proposal.</u></p>
	PRE-CONSTRUCTION
2	<p>The consent holder shall:</p> <ol style="list-style-type: none"> be responsible for all the contracted operations relating to the exercise of this consent including the Construction Works; and ensure compliance with consent conditions.
3	<p>Prior to commencement of any physical works required for the activities described in Condition (1) (hereafter referred to as the 'Construction Works') the consent holder or its agent or contractor shall arrange and conduct a pre-construction site meeting between the Canterbury Regional Council and all persons involved in the Construction Works. At a minimum, the following shall be covered at the meeting:</p> <ol style="list-style-type: none"> Scheduling and staging of the Construction Works; Responsibilities of all relevant parties; Contact details for all relevant parties; Expectations regarding communication between all relevant parties; Procedures for implementing any changes to the Construction Works; Site inspection; and Confirmation that all persons involved in the Construction Works have copies of the contents of this consent document, the Erosion and Sediment Control Plan (ESCP) and all plans and methodologies associated with this consent.
	GENERAL

4	<p>Prior to any works authorised by this consent being carried out in the period 1 September to 1 February, the consent holder shall ensure that:</p> <ol style="list-style-type: none"> a suitably qualified and independent person inspects the proposed area of works, no earlier than eight days prior to any works being carried out, and locates any bird breeding sites of birds listed in Appendix A, which forms part of this consent; the person carrying out the inspection prepares a written report that identifies all the located bird breeding or nesting sites and provides copies of that report to the consent holder and the Canterbury Regional Council, attention Regional Leader - Monitoring and Compliance; the name and qualifications of the person carrying out the inspection are provided to the Canterbury Regional Council with the report; any person carrying out works authorised by this consent are informed of any bird breeding or nesting sites located; and where work ceases for more than eight days, the site will be re-inspected for bird breeding and nesting sites in accordance with parts (a) to (d) of this condition
5	<p>Vehicles and/or machinery shall not operate within 100 metres of birds which are nesting or rearing their young in the bed of the river, except as identified by the inspection undertaken in accordance with condition (5) and detailed in the report. For the purposes of this condition birds are defined as those bird species listed in Appendix A, which forms part of this consent.</p>
6	<p>To prevent the spread of pest species, including but not limited to Didymo, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures and that machinery shall be free of plants and plant seeds prior to use in the riverbed.</p> <p>Advice Note: You can access the most current version of these procedures from the Biosecurity New Zealand website http://www.biosecurity.govt.nz</p>
7	<p>All practicable measures shall be undertaken to minimise:</p> <ol style="list-style-type: none"> erosion of the bed and banks of the Rangitata River; and the discharge of sediment to the Rangitata River; as a result of the works.
8	<p>All practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery including but not limited to:</p> <ol style="list-style-type: none"> There shall be no storage of fuel or refuelling of vehicles and machinery within 20 metres of the bed of a river; and Fuel shall be stored securely or removed from site overnight. <p>Advice Note: In addition to this consent, the consent holder will also need to ensure that the activity complies with Canterbury Land and Water Regional Plan (LWRP) Rule 5.145 (Refuelling in Lake and Riverbeds). If the activity does not comply with Rule 5.175 of the LWRP, an additional consent will be required pursuant to section 15 of the Resource Management Act 1991.</p>
9	<p>Works shall:</p> <ol style="list-style-type: none"> not be carried out on Sundays or public holidays; and only occur between the hours of 6:30 am and 8:00 pm inclusive. <p>Advice Note: The consent holder should also check compliance with the relevant District Council regulations.</p>
	<p>COMPLAINTS REGISTER</p>
9A.1	<p><u>The consent holder shall keep a register of complaints lodged with it in respect of the exercise of these this resource consents.</u></p> <p><u>The register prepared and maintained in accordance with this condition shall record the following details for each complaint that is made:</u></p>

	<ul style="list-style-type: none"> a. <u>The date and time of the complaint; and</u> b. <u>The name and contact details of the complainant (if they are provided to the consent holder) and a description of the complaint; and</u> c. <u>The investigations (if any) that the consent holder undertook in response to each complaint; and</u> d. <u>Any action that was undertaken to address the concerns raised in the complaint; and</u> e. <u>The feedback provided to each complainant.</u>
9A.2	<u>The consent holder shall forward a copy of the register prepared and maintained in accordance with condition 9A.1 to the Canterbury Regional Council, Attention Regional Leader: Monitoring and Compliance <u>RMA Compliance and Monitoring Manager</u> within five (5) working days of receiving a request to do so from the Council.</u>
9A.3	<u>The consent holder shall appoint a Liaison Officer for the Proposal prior to any construction works / activities authorised by this <u>these</u> resource consents commencing. The Liaison Officer shall be the point of contact for the public during construction of the Proposal. The name and contact details for the Liaison Officer shall be advertised at the main construction entrance for the Klondyke <u>Storage Dam Pond</u>.</u>
	<u>CONSTRUCTION MANAGEMENT PLAN</u>
9B.1	<u>The purpose of the Construction Management Plan (CMP) is to describe the measures that will be implemented to ensure that all construction related environmental effects are avoided, minimised, or managed in accordance with the conditions of these resource consents and engineering / environmental best practice.</u>
9B.2	<p><u>The objectives of the CMP are to:</u></p> <ul style="list-style-type: none"> a. <u>Avoid and / or minimise the magnitude of the adverse effects generated during the construction activities and / or works authorised by these resource consents; and</u> b. <u>Provide clarity as to how the Proposal is to be constructed by setting out the:</u> <ul style="list-style-type: none"> i. <u>Construction methodology that is to be employed to construct the Proposal; and</u> ii. <u>Staging, timing, duration and monitoring of construction works and / or activities; and</u> iii. <u>Measures that are to be applied, and when they are to be applied, to minimise the effects of the construction activities and / or works authorised by these resource consents. These measures shall include:</u> <ul style="list-style-type: none"> * <u>A requirement that all construction works / activities be in accordance with the Canterbury Regional Council's ESCG (2007);</u> * <u>Measures necessary to provide for stormwater disposal and sediment removal;</u> * <u>The inclusion and / or maintenance of a vegetated strip (or other treatment system supported by the ESCG) between all areas of earthworks and water courses / water bodies / water races;</u> * <u>Controls on the siting of stockpiles to avoid sediment-entrained runoff entering water races / water courses / water bodies and to reduce the risk of fugitive dust emissions;</u> * <u>Measures to avoid the entrainment of oil, fuels or any other hazardous substances in stormwater, with particular emphasis on re-fuelling areas and repair areas; and</u> * <u>Requirements regarding the stabilisation and maintenance of all construction site entrances associated with the Proposal</u>

	<p>from public roads; and</p> <p>iv. <u>The means by which stakeholders are to be kept informed of the construction works / activities being undertaken by the consent holder and/or its contractor(s).</u></p>
9B.3	<p><u>The CMP shall contain the following sections:</u></p> <p>a. <u>Purpose and Scope</u></p> <p>b. <u>Personnel, Team Structure, Contact Details and Responsibilities. This will include the 24-hour contact details for the following personnel:</u></p> <p>i. <u>The administrator of the complaints register (if required by conditions of this consent); and</u></p> <p>ii. <u>The Liaison Officer (if required by conditions of this consent);</u></p> <p>c. <u>Environmental Policy and Environmental Management System;</u></p> <p>d. <u>Resource Consent and Building Consent Requirements;</u></p> <p>e. <u>Accidental Discovery Protocol (if required by conditions of this consent);</u></p> <p>f. <u>Environmental Management Sub-Plans including, as a minimum, the following plans:</u></p> <p>i. <u>Erosion and Sediment Control Plan;</u></p> <p>ii. <u>Hazardous Substances Spill Management Plan;</u></p> <p>iii. <u>Vibration Management Plan;</u></p> <p>iv. <u>Waste Management Plan;</u></p> <p>v. <u>Works in the River Management Plan;</u></p> <p>vi. <u>Smoke Management Plan;</u></p> <p>vii. <u>Dust Management Plan; and</u></p> <p>viii. <u>Contaminated Land Remediation Action Plan</u></p> <p>g. <u>Construction Methodology;</u></p> <p>h. <u>Training and Induction of Contractors and their Staff;</u></p> <p>i. <u>Subcontractor Management;</u></p> <p>j. <u>Monitoring and Site Inspections;</u></p> <p>k.- <u>Conformance and Corrective / Preventative Actions;</u></p> <p>l. <u>Meetings Frequency and Purpose; and</u></p> <p>m. <u>Environmental Systems Reviews.</u></p>
	Erosion and Sediment Control Plan
10A	<p><u>The purpose of the Erosion and Sediment Control Management Plan is to ensure that the consent holder implements appropriate measures, as defined by the Canterbury Regional Council's Erosion and Sediment Control Guidelines (2007) (an equivalent industry guideline), to minimise all actual or potential erosion and sediment effects arising from the construction works / activities authorised by these resource consents.</u></p>
10	<p>The consent holder shall prepare an ESCP, subject to the following conditions:</p> <p>a. No less than one month before the commencement of any Construction Works, a copy of the ESCP shall be submitted to the Canterbury Regional Council: Attention Regional Leader – Monitoring and Compliance for review and certification. All activities authorised by this consent must be carried out in accordance with the ESCP;</p> <p>b. Unless Canterbury Regional Council provides notice in writing that it is unable to certify the ESCP within 20 working days of receipt of a draft ESCP, it is deemed to be certified by the Canterbury Regional Council. For the purposes of this condition, "Certification" means that the ESCP contains all the information specified in Condition 5(c);</p> <p>c. The ESCP shall include:</p> <p>i. A list of the staff and / or experts responsible for reviewing the ESCP;</p> <p>ii. A description of staff training and induction requirements that will be undertaken to ensure that the ESCMP is followed by all acting in accordance with these resource consents;</p> <p>iii. A description of the site and local receiving environment;</p>

	<ul style="list-style-type: none"> iv. A site drainage plan; v. Details of any anticipated earth excavation requirements; vi. A schedule detailing the anticipated staging of the Construction Works including: <ul style="list-style-type: none"> A. Site preparation works; B. Any equipment or plant mobilisation necessary for carrying out the construction works; and C. Any field verification requirement. vii. A detailed description of how run on and run off water will be managed within the construction site; viii. Measures to avoid or minimise any sediment entering exposed groundwater or the Rangitata River or being tracked onto roadways or neighbouring properties; ix. A detailed description of how water will be treated prior to disposal to the various receiving environments; x. Details of compliance checks, and any maintenance necessary to ensure that measures required under the ESCP or this consent are performing effectively; xi. Identification of persons responsible for carrying out the actions within the ESCP including their contact details; and xii. A detailed description of how vegetation stripping and replanting would be undertaken to manage the area of disturbed ground that will be open throughout the construction works / activities authorised by these resource consents. <p>d. The ESCP shall be prepared in accordance with:</p> <ul style="list-style-type: none"> i. Canterbury Regional Council's Erosion and Sediment Control Guidelines (2007) Environment Canterbury's "Erosion and Sediment Control Toolbox for the Canterbury Region" (ESCT) http://esccanterbury.co.nz/; or ii. An equivalent industry guideline. If an alternative guideline is used, the SMP shall provide details of the relevant alternative methods used and an explanation of why they are more appropriate than the ESCT. <p>e. Any amendments or revisions to the ESCP must be submitted to Canterbury Regional Council: Attention Regional Leader – Monitoring and Compliance.</p>
	HAZARDOUS SUBSTANCE MANAGEMENT
11	<p>The consent holder shall prepare a Hazardous Substances Spill Management Plan (HSSMP): The HSSMP shall include but is not limited to:</p> <ul style="list-style-type: none"> a. Identifying the hazardous substances that will be retained on the site during construction and the restrictions that apply to, and are to be followed, in relation to their storage and use; b. Identifying the potential situations and locations where hazardous substances may be accidentally spilled, and to ensure that the appropriate measures are implemented by the consent holder to ensure that all actual or potential hazardous substances effects arising from the construction activities are minimised. This includes, but is not limited to, measures to provide secondary containment around storage locations and refuelling sites, to minimise the extent of soil contamination and to prevent run-off of spilled liquids from reaching surface water bodies; c. A list of the staff and/or experts responsible for reviewing the HSSMP; d. A description of staff / expert training and induction requirements that will be undertaken to ensure that the HSSMP is followed by all acting in accordance with these resource consents; e. A description of the site and local receiving environment; f. The procedures that are to be followed for the use of the hazardous

	<p>substances within the construction site, including the construction personnel that are authorised to use them;</p> <p>g. The minimum requirements for spill management kits that are to be distributed throughout the construction site and the procedures that are to apply to the disposal of used spill management materials; and</p> <p>h. The procedures for corrective action in the event of a spill.</p>
12	<p>The consent holder shall take all practicable measures to avoid spills of fuel or any other contaminants. In the event of a spill of fuel or any other hazardous substances, the following corrective action shall be undertaken but is not limited to:</p> <p>a. All practicable measures shall be taken to prevent the spill being discharged into land via the stormwater system;</p> <p>b. The spill shall be cleaned up as soon as practicable and any contaminants that accumulate in the stormwater system shall be removed and the spill area shall be inspected and cleaned, and measures shall be taken to prevent reoccurrence;</p> <p>c. The consent holder shall provide the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, with the following information within 24 hours of a spill:</p> <p>i. The date, time, location and estimated volume of the spill;</p> <p>ii. The cause of the spill;</p> <p>iii. The type of contaminant(s) spilled;</p> <p>iv. Clean up procedures undertaken including evidence of appropriate disposal;</p> <p>v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;</p> <p>vi. An assessment of any potential effects of the spill; and</p> <p>i. Measures to be undertaken to prevent a reoccurrence.</p>
13	<p>Any material, including sediment, hydrocarbons and other contaminants, removed in the exercising of this consent shall be disposed of at a location or facility authorised to receive such material.</p>
WORKS IN THE RIVER MANAGEMENT PLAN	
14	<p>The consent holder shall prepare and adhere to a 'works in the River Management Plan' (WRMP). The WRMP primary objective is to ensure that the appropriate measures, as defined by Canterbury Regional Council's Erosion and Sediment Control Guidelines (2007) Canterbury Regional Council's Erosion and Sediment Control Toolbox For Canterbury are implemented by the consent holder such that all actual or potential riverbed effects arising from the construction and any recurrent maintenance activities are minimised.</p>
15	<p>The WRMP shall include:</p> <p>a. Identification of the staff and / or experts responsible for reviewing the WRMP;</p> <p>b. A description of staff training and induction requirements that will be undertaken to ensure that the WRMP is followed by all acting in accordance with these resource consents;</p> <p>c. A description of the site and local receiving environment;</p> <p>d. An assessment of flood events, water levels and their return periods;</p> <p>e. A requirement for the consent holder to monitor the weather throughout the construction of the Proposal and to set the necessary trigger events that are to be used as an early warning system (where work would be ceased and plant removed from the riverbed); and</p> <p>f. A description of how works (including any recurrent maintenance works</p>

	that are conducted following the first filling of the Klondyke Storage Dam) in the Rangitata River will be managed in order to minimise the risk of adverse environmental effects, and how those effects will be remedied and/or mitigated.
16	A copy of the WRMP shall be provided to the Canterbury Regional Council, attention Regional Leader – Monitoring and Compliance, at least 10 days prior to the activities authorised under this consent commencing.
	ACCIDENTAL DISCOVERY PROTOCOL - ARCHAEOLOGICAL MATERIALS
17	In the event of any discovery of archaeological material the consent holder shall immediately: <ul style="list-style-type: none"> a. Cease work within 10 metres of any part of the discovery and mark off the affected area; b. Advise the Canterbury Regional Council and Ashburton District Council of the discovery; and c. Advise Heritage New Zealand Pouhere Taonga of the discovery.
18	If the archaeological material is determined to be Kōiwi Tangata (human bones) of Māori origin or taonga (treasured artefacts) by Heritage New Zealand Pouhere Taonga, the consent holder shall immediately: <ul style="list-style-type: none"> a. advise the office of Upoko Runanga o Arowhenua of the discovery; b. consult Upoko Runanga o Arowhenua on any matters of tikanga (protocol) that are required in relation to the discovery and prior to the commencement of any investigation, and perform those requirements; and c. Advise the New Zealand Police of the discovery in relation to Kōiwi Tangata (human bones).
19	Iwi representatives, Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager and Heritage New Zealand Pouhere Taonga Trust shall be afforded the opportunity to visit the site within up to three working days of the discovery (if and as they consider it necessary), and such persons shall be given a reasonable time to record and recover archaeological features discovered before work may recommence on the site. The site inspection shall occur within 6 working days of the discovery being made.
20	The consent holder may recommence any work if Heritage New Zealand Pouhere Taonga (following consultation with Kaitiaki Runanga if the material is of Māori origin) provides a statement in writing to the Council that appropriate action has been undertaken in relation to the archaeological material discovered. <p>Advice Notes</p> <ol style="list-style-type: none"> 1. <i>Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Māori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc., may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/kōiwi may date to any historic period.</i> 2. <i>It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides</i>

	<i>for substantial penalties for unauthorised damage or destruction. An authority from Heritage New Zealand Pouhere Taonga Trust may be required.</i>
	AFTER WORKS
21	All accumulated debris and other waste material shall be removed from the site.
22	The Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance shall be notified within seven working days after the completion of any works authorised by this consent.
	ADMINISTRATION
23	<p>Pursuant to Section 128(1) of the Resource Management Act 1991, the Consent Authority may serve notice of its intention to review the conditions of this consent within a period of three months commencing on each anniversary of the date of issue of the consent for any of the following purposes:</p> <ul style="list-style-type: none"> a. To deal with any adverse effects on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or b. To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment; or c. To deal with any other adverse effect on the environment on which the exercise of the consent may have any influence.
24	<p>The lapsing date for the purposes of Section 125 of the Resource Management Act 1991 shall be 153 years from the date consent is issued.</p> <p>Advice note: 'Exercised' is defined as implementing any requirements to operate this consent <u>and</u> undertaking the activity as described in these conditions and/or application documents.</p>
<u>25</u>	<u>This resource consent shall expire 35 years after it has commenced.</u>
	<p>Appendix A - list of bird species referred to in bird nesting conditions (5) South Island</p> <p>Pied oystercatcher Black stilt Pied stilt Wrybill Banded dotterel Black-fronted dotterel Blue duck Paradise shelduck Grey duck NZ shoveler Grey teal NZ scaup Black-billed gull Red-billed gull Caspian tern White-fronted tern Black-fronted tern White-winged Black tern Australasian bittern Marsh crake Spotless crake Cormorant/shag colonies Royal spoonbill Crested grebe</p>

CRC182538: to temporarily discharge sediment to the Rangitata River as a result of the construction and maintenance of the fish bypass outlet;

1	The activities shall be limited to the discharge of sediment and water generated as a result of the works carried out as authorised under consents CRC182537 and CRC182539, or any subsequent replacements.
1A	<p><u>The Proposal discharges shall be constructed, operated and maintained in accordance with the details contained within the following documents:</u></p> <p><u>a. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in July 2016 and entitled "Lake Klondyke: A Proposed Water Storage Facility, Assessment of Environmental Effects Report & Resource Consent Application, Prepared for the Rangitata Diversion Race Management Limited, Date Finalised: July 2016"; and</u></p> <p><u>b. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in November 2017 and entitled "Proposed Rangitata Diversion Race Fish Screen and Supplementary Matters Resource Consent Application".</u></p> <p><u>except where modified by specific conditions set out in these this resource consents or by the plans authorised by the building consent for the Proposal.</u></p>
2	The discharge shall only occur to the Rangitata River at or about map reference NZTM2000: 1458275 mE 5151564 mN <u>and for maintenance activities up to 500 metres upstream and downstream of this point.</u>
3	<p>All practicable measures shall be undertaken to minimise:</p> <ol style="list-style-type: none"> erosion of the bed and banks of the Rangitata River; and the amount of sediment discharged of sediment to the Rangitata River.
4	<p>Pursuant to Section 128(1) of the Resource Management Act 1991, the Consent Authority may serve notice of its intention to review the conditions of this consent within a period of three months commencing on each anniversary of the date of issue of the consent for any of the following purposes:</p> <ol style="list-style-type: none"> To deal with any adverse effects on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment; or To deal with any other adverse effect on the environment on which the exercise of the consent may have any influence.
5	<p>The lapsing date for the purposes of Section 125 of the Resource Management Act 1991 shall be <u>153</u> years from the date consent is issued.</p> <p>Advice note: 'Exercised' is defined as implementing any requirements to operate this consent <u>and</u> undertaking the activity as described in these conditions and/or application documents.</p>
6	<u>This resource consent shall expire 35 years after it has commenced.</u>

CRC182537: to disturb the bed of the Rangitata River for the construction of the fish bypass outlet;

	GLOSSARY OF TERMS & ABBREVIATIONS USED IN THIS RESOURCE CONSENT
0	<p><u>Appropriately qualified and experienced expert(s)</u> means a person or persons:</p> <p><u>a. With a relevant and recognised tertiary qualification(s) to the topic being assessed;</u></p> <p><u>b. Whom is (are) recognised as a full member (or equivalent) of a relevant professional institution(s) (such as the Institution of Professional Engineers New Zealand), where such institutions exist;</u></p> <p><u>c. Has more than 10-years relevant experience in the topic being assessed;</u></p> <p><u>and</u></p> <p><u>Certifies and Certification</u> means a process whereby:</p> <p><u>a. The consent holder supplies a report, action plan, design plan, construction methodology, monitoring plan, commissioning plan, safety system or a management plan, and the Canterbury Regional Council appoints an appropriately qualified and experienced expert to assesses the documentation submitted to ensure that it achieves the requirements of the relevant condition(s) of consent;</u></p> <p><u>b. Should the documents supplied in accordance with condition 0(a), in the opinion of the expert appointed by the Council, achieve the intent of the relevant condition(s) of these resource consents, the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council shall issue a written certificate to the consent holder confirming that the requirements of the relevant condition(s) have been satisfied;</u></p> <p><u>c. If the expert appointed by the Council is not satisfied that the documents supplied in accordance with condition (a) achieves requirements of the relevant condition(s), the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council shall advise (in writing) the consent holder of the experts concerns and ask that the report, commissioning plan, monitoring plan, action plan, safety system or management plan be modified so as to address the concerns, and then be resubmitted;</u></p> <p><u>d. This process shall be repeated until the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council is able (on the advice of the expert) to certify that the requirements of the applicable condition(s) of consent have been satisfied;</u></p> <p><u>CLG</u> means the Community Liaison Group;</p> <p><u>CMP</u> means Construction Management Plan;</p> <p><u>Construction site</u> includes all areas, excluding gazetted and vested road reserves that contain formed roads, where construction works / activities authorised by these resource consents are being undertaken by the consent holder.</p> <p><u>Council</u> means the Canterbury Regional Council;</p> <p><u>EAP</u> means the Emergency Action Plan;</p> <p><u>ESCP</u> means Erosion and Sediment Control Plan;</p> <p><u>Fish screen</u> means the rotary fish screen and its associated bypass channel;</p> <p><u>FSVMP</u> means Fish Screen Verification Monitoring Plan;</p> <p><u>Flood flow take</u> means a flood flow abstraction from the Rangitata River;</p> <p><u>HSSMP</u> means the Hazardous Substances Spill Management Plan;</p> <p><u>Klondyke Pond</u> means the Lake Klondyke Water Storage Facility;</p> <p><u>km/hr</u> means kilometres per hour;</p> <p><u>l/s</u> means litres per second</p> <p><u>m³</u> means cubic metres</p> <p><u>m³/s</u> means cubic metres per second</p> <p><u>m</u> means metre</p> <p><u>m/s</u> means metres per second;</p> <p><u>mm/s</u> means millimetres per second</p> <p><u>NZSOLD</u> means New Zealand Society on Large Dams New Zealand;</p> <p><u>PPV</u> means Peak Particle Velocity</p> <p><u>Reasonable Mixing Zone</u> means, for the purposes of condition 18.0A, a reasonable mixing zone extending from the point of discharge from the Sluice;</p>

	<p>Channel to a point that is 200 metres downstream of the discharge point.</p> <p>Regional Water Table means the upper surface of the full saturated groundwater system but does not, for the purposes of these resource consents, include perched groundwater (which is groundwater in saturated strata that occurs above the regional water table but is separated from it by a layer of unsaturated strata).</p> <p>RDR means the Rangitata Diversion Race.</p> <p>RDR mods means the modifications to the Rangitata Diversion Race.</p> <p>RL means the right bank when looking downstream.</p> <p>RMA means the Resource Management Act</p> <p>The Proposal means the Klondyke Pond Dam, WWC, RDR mods, fish screen, SBR relocation, flood flow take and refuge, and all incidental work.</p> <p>TSP means total suspended particulate.</p> <p>WRMP means Works in the River Management Plan</p>
	<u>CERTIFICATION PROCESS</u>
<u>0A.1</u>	<p>Except where explicitly required otherwise by conditions of this consents, the consent holder shall:</p> <ul style="list-style-type: none"> a. Engage an appropriately qualified and experienced independent expert (or experts) to prepare the management plans, design plans, construction methodology, monitoring plans, action plan, commissioning plan and safety system specified in the conditions of this consent using the draft versions of these plans (which are attached as Annexure B) as a base document; b. Provide drafts of each of the documents required by condition 0A(a) to the Canterbury Regional Council, Attention Regional Leader - Monitoring and Compliance, not less than three months prior to construction works / activities commencing in accordance with these resource consents; c. Not commence any construction works / activities authorised by these resource consents until it has received a certificate from the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council that the management plan, design plan, construction methodology, monitoring plan, action plan, commissioning plan or safety system is consistent with the applicable conditions of this consent; d. Adhere to and implement the certified version of the management plan, design plans, construction methodology, monitoring plan, action plan, commissioning plan or safety system; e. Submit any proposed variations to the management plans, design plans, construction methodology, action plan, safety system, monitoring plans and commissioning plan to the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council, at least seven days prior to when the proposed change will be implemented by the consent holder. Any variations made shall not take effect until the Regional Leader: Compliance & Monitoring of the Canterbury Regional Council certifies that the variations accord with the applicable conditions of the resource consent; f. Appoint an appropriately qualified and independent expert (or experts) to review the management plans, action plan, safety system, monitoring plans and commissioning plan at the frequency set out in these resource consents. Should the conditions of these resource consents not set a frequency, the reviews shall be conducted annually. Such reviews are to ensure that the management plans, action plan, safety system, monitoring plans and commissioning plan continue to achieve the conditions of these resource consents. g. Any changes made as a result of the reviews conducted in accordance with condition 0A(f) shall be submitted to the Canterbury Regional Council and shall not take effect until the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council certifies that the changes accord with the applicable conditions of these resource consents; h. Pay the costs of the expert(s) appointed by the Canterbury Regional Council to certify the management plans, design plans, construction methodology, monitoring plans, commissioning plan, action plan and safety system (and any variations or changes thereto) in accordance with conditions 0A(c) and 0A(h); and

	<p>i. <u>Ensure that copies of the certified commissioning plan, design plans, construction methodology and management plans, monitoring plans, action plan, safety system and management plans set out in these conditions are available on site at all times during the construction works / activities authorised by this consent; and</u></p> <p>j. <u>Ensure that all key personnel are to be made aware of the content and requirements / obligations of the management plans, action plan, safety system, commissioning plan and monitoring plans.</u></p>
0A.2	<u>Notwithstanding conditions 0A(c), 0A(e), 0A(f) and 0A(h), if the consent holder has not received a written response from the Canterbury Regional Council on or after the 30th working day of it providing a management plan, monitoring plan, action plan, commissioning plan or safety system for certification (or variations / changes to these documents), the works / activities authorised by these resource consents may commence in accordance with the document that was provided to the Canterbury Regional Council.</u>
	SCOPE
1	The activity shall be limited to the use of land to disturb the bed of the Rangitata River for the construction of a fish bypass outlet, at or about map reference NZTM2000: 1458275 mE 5151564 mN.
1A	<p><u>The Proposal use of land shall be constructed, operated and maintained in accordance with the details contained within the following documents:</u></p> <p>a. <u>The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in July 2016 and entitled "Lake Klondyke: A Proposed Water Storage Facility, Assessment of Environmental Effects Report & Resource Consent Application, Prepared for the Rangitata Diversion Race Management Limited, Date Finalised: July 2016"; and</u></p> <p>b. <u>The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in November 2017 and entitled "Proposed Rangitata Diversion Race Fish Screen and Supplementary Matters Resource Consent Application".</u></p> <p><u>Except where modified by specific conditions set out in these this resource consents or by the plans authorised by the building consent for the Proposal.</u></p>
	PRE-CONSTRUCTION
2	<p>The consent holder shall:</p> <p>a. be responsible for all the contracted operations relating to the exercise of this consent including the Construction Works; and</p> <p>b. ensure compliance with consent conditions.</p>
3	<p>Prior to commencement of any physical works required for the activities described in Condition (1) (hereafter referred to as the 'Construction Works') the consent holder or its agent or contractor shall arrange and conduct a pre-construction site meeting between the Canterbury Regional Council and all persons involved in the Construction Works. At a minimum, the following shall be covered at the meeting:</p> <p>a. Scheduling and staging of the Construction Works;</p> <p>b. Responsibilities of all relevant parties;</p> <p>c. Contact details for all relevant parties;</p> <p>d. Expectations regarding communication between all relevant parties;</p> <p>e. Procedures for implementing any changes to the Construction Works;</p> <p>f. Site inspection; and</p> <p>g. Confirmation that all persons involved in the Construction Works have copies of the contents of this consent document, the Erosion and Sediment Control Plan (ESCP) and all plans and methodologies associated with this consent.</p>
	GENERAL
4	Prior to any works authorised by this consent being carried out in the period 1 September to 1 February, the consent holder shall ensure that:

	<ul style="list-style-type: none"> a. a suitably qualified and independent person inspects the proposed area of works, no earlier than eight days prior to any works being carried out, and locates any bird breeding sites of birds listed in Appendix A, which forms part of this consent; b. the person carrying out the inspection prepares a written report that identifies all the located bird breeding or nesting sites and provides copies of that report to the consent holder and the Canterbury Regional Council, attention Regional Leader – Monitoring and Compliance; c. the name and qualifications of the person carrying out the inspection are provided to the Canterbury Regional Council with the report; d. any person carrying out works authorised by this consent are informed of any bird breeding or nesting sites located; and e. where work ceases for more than eight days, the site will be re-inspected for bird breeding and nesting sites in accordance with parts (a) to (d) of this condition.
5	Vehicles and/or machinery shall not operate within 100 metres of birds which are nesting or rearing their young in the bed of the river, except as identified by the inspection undertaken in accordance with condition (5) and detailed in the report. For the purposes of this condition birds are defined as those bird species listed in Appendix A, which forms part of this consent.
6	<p>To prevent the spread of pest species, including but not limited to Didymo, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures and that machinery shall be free of plants and plant seeds prior to use in the riverbed.</p> <p>Advice Note: You can access the most current version of these procedures from the Biosecurity New Zealand website http://www.biosecurity.govt.nz</p>
7	<p>All practicable measures shall be undertaken to minimise:</p> <ul style="list-style-type: none"> a. erosion of the bed and banks of the Rangitata River; and b. the discharge of sediment to the Rangitata River; as a result of the works.
8	<p>All practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery including but not limited to:</p> <ul style="list-style-type: none"> a. There shall be no storage of fuel or refuelling of vehicles and machinery within 20 metres of the bed of a river. b. Fuel shall be stored securely or removed from site overnight <p>Advice Note: In addition to this consent, the consent holder will also need to ensure that the activity complies with Canterbury Land and Water Regional Plan (LWRP) Rule 5.145 (Refuelling in Lake and Riverbeds). If the activity does not comply with Rule 5.175 of the LWRP, an additional consent will be required pursuant to section 15 of the Resource Management Act 1991.</p>
9	<p>Works shall:</p> <ul style="list-style-type: none"> a. not be carried out on Sundays or public holidays. b. only occur between the hours of 6:30 am and 8:00 pm inclusive <p>Advice Note: The consent holder should also check compliance with the relevant District Council regulations.</p>
	COMPLAINTS REGISTER
9A.1	<p><u>The consent holder shall keep a register of complaints lodged with it in respect of the exercise of these resource consents.</u></p> <p><u>The register prepared and maintained in accordance with this condition shall record the following details for each complaint that is made:</u></p> <ul style="list-style-type: none"> <u>a. The date and time of the complaint; and</u> <u>b. The name and contact details of the complainant (if they are provided to the</u>

	<p>consent holder) and a description of the complaint; and</p> <p>c. The investigations (if any) that the consent holder undertook in response to each complaint; and</p> <p>d. Any action that was undertaken to address the concerns raised in the complaint; and</p> <p>e. The feedback provided to each complainant.</p>
9A.2	The consent holder shall forward a copy of the register prepared and maintained in accordance with condition 9A.1 to the Canterbury Regional Council, Attention RMA Compliance and Monitoring Manager within five (5) working days of receiving a request to do so from the Council.
9A.3	The consent holder shall appoint a Liaison Officer for the Proposal prior to any construction works / activities authorised by these this resource consents commencing. The Liaison Officer shall be the point of contact for the public during the exercising of this consent construction of the Proposal. The name and contact details for the Liaison Officer shall be advertised at the main construction entrance for the Klondyke Pond Storage Dam.
	CONSTRUCTION MANAGEMENT PLAN
9B.1	The purpose of the Construction Management Plan (CMP) is to describe the measures that will be implemented to ensure that all construction related environmental effects are avoided, minimised, or managed in accordance with the conditions of these resource consents and engineering / environmental best practice.
9B.2	<p>The objectives of the CMP are to:</p> <p>a. Avoid and / or minimise the magnitude of the adverse effects generated during the construction activities and / or works authorised by these resource consents; and</p> <p>b. Provide clarity as to how the Proposal is to be constructed by setting out the:</p> <ul style="list-style-type: none"> i. Construction methodology that is to be employed to construct the Proposal; and ii. Staging, timing, duration and monitoring of construction works and / or activities; and iii. Measures that are to be applied, and when they are to be applied, to minimise the effects of the construction activities and / or works authorised by these resource consents. These measures shall include: <ul style="list-style-type: none"> * A requirement that all construction works / activities be in accordance with the Canterbury Regional Council's ESCG (2007); * Measures necessary to provide for stormwater disposal and sediment removal; * The inclusion and / or maintenance of a vegetated strip (or other treatment system supported by the ESCG) between all areas of earthworks and water courses / water bodies / water races; * Controls on the siting of stockpiles to avoid sediment-entrained runoff entering water races / water courses / water bodies and to reduce the risk of fugitive dust emissions; * Measures to avoid the entrainment of oil, fuels or any other hazardous substances in stormwater, with particular emphasis on re-fuelling areas and repair areas; and * Requirements regarding the stabilisation and maintenance of all construction site entrances associated with the Proposal from public roads; and iv. The means by which stakeholders are to be kept informed of the construction works / activities being undertaken by the consent holder and/or its contractor(s).
9B.3	The CMP shall contain the following sections:

	<p><u>a. Purpose and Scope</u></p> <p><u>b. Personnel, Team Structure, Contact Details and Responsibilities. This will include the 24-hour contact details for the following personnel:</u></p> <p><u>i. The administrator of the complaints register (if required by conditions of this consent); and</u></p> <p><u>ii. The Liaison Officer (if required by conditions of this consent);</u></p> <p><u>c. Environmental Policy and Environmental Management System;</u></p> <p><u>d. Resource Consent and Building Consent Requirements;</u></p> <p><u>e. Accidental Discovery Protocol (if required by conditions of this consent);</u></p> <p><u>f. Environmental Management Sub-Plans including, as a minimum, the following plans:</u></p> <p><u>i. Erosion and Sediment Control Plan;</u></p> <p><u>ii. Hazardous Substances Spill Management Plan;</u></p> <p><u>iii. Vibration Management Plan;</u></p> <p><u>iv. Waste Management Plan;</u></p> <p><u>v. Works in the River Management Plan;</u></p> <p><u>vi. Smoke Management Plan;</u></p> <p><u>vii. Dust Management Plan; and</u></p> <p><u>viii. Contaminated Land Remediation Action Plan</u></p> <p><u>ix. Construction Methodology;</u></p> <p><u>h. Training and Induction of Contractors and their Staff;</u></p> <p><u>i. Subcontractor Management;</u></p> <p><u>j. Monitoring and Site Inspections;</u></p> <p><u>k.- Conformance and Corrective / Preventative Actions;</u></p> <p><u>l. Meetings Frequency and Purpose; and</u></p> <p><u>m. Environmental Systems Reviews.</u></p>
	Erosion and Sediment Control Plan
10A	<p><u>The purpose of the Erosion and Sediment Control Management Plan is to ensure that the consent holder implements appropriate measures, as defined by the Canterbury Regional Council's Erosion and Sediment Control Guidelines (2007) (an equivalent industry guideline), to minimise all actual or potential erosion and sediment effects arising from the construction works / activities authorised by these resource consents.</u></p>
10	<p>The consent holder shall prepare an ESCP, subject to the following conditions:</p> <p>a. No less than one month before the commencement of any Construction Works, a copy of the ESCP shall be submitted to the Canterbury Regional Council: Attention Regional Leader – Monitoring and Compliance for review and certification. All activities authorised by this consent must be carried out in accordance with the ESCP;</p> <p>b. Unless Canterbury Regional Council provides notice in writing that it is unable to certify the ESCP within 20 working days of receipt of a draft ESCP, it is deemed to be certified by the Canterbury Regional Council. For the purposes of this condition, "Certification" means that the ESCP contains all the information specified in Condition 5(c);</p> <p>c. The ESCP shall include:</p> <p>i. A list of the staff and / or experts responsible for reviewing the ESCP;</p> <p>ii. A description of staff training and induction requirements that will be undertaken to ensure that the ESCMP is followed by all acting in accordance with these resource consents;</p> <p>iii. A description of the site and local receiving environment;</p> <p>iv. A site drainage plan;</p> <p>v. Details of any anticipated earth excavation requirements;</p> <p>vi. A schedule detailing the anticipated staging of the Construction Works including:</p> <p>A. Site preparation works;</p> <p>B. Any equipment or plant mobilisation necessary for carrying out the construction works;</p> <p>C. Any field verification requirement.</p> <p>vii. A detailed description of how run on and run off water will be managed</p>

	<p>within the construction site;</p> <p>viii. Measures to avoid or minimise any sediment entering exposed groundwater or the Rangitata River or being tracked onto roadways or neighbouring properties;</p> <p>ix. A detailed description of how water will be treated prior to disposal to the various receiving environments;</p> <p>x. Details of compliance checks, and any maintenance necessary to ensure that measures required under the ESCP or this consent are performing effectively;</p> <p>xi. Identification of persons responsible for carrying out the actions within the ESCP including their contact details;</p> <p>xii. A detailed description of how vegetation stripping and replanting would be undertaken to manage the area of disturbed ground that will be open throughout the construction works / activities authorised by these resource consents.</p> <p>d. The ESCP shall be prepared in accordance with:</p> <p>i. Canterbury Regional Council's Erosion and Sediment Control Guidelines (2007) Environment Canterbury's "Erosion and Sediment Control Toolbox for the Canterbury Region" (ESCT) http://esccanterbury.co.nz/; or</p> <p>ii. An equivalent industry guideline. If an alternative guideline is used, the SMP shall provide details of the relevant alternative methods used and an explanation of why they are more appropriate than the ESCT.</p> <p>e. Any amendments or revisions to the ESCP must be submitted to Canterbury Regional Council: Attention Regional Leader – Monitoring and Compliance.</p>
	Hazardous Substance Management
11	<p>The consent holder shall prepare a Hazardous Substances Spill Management Plan (HSSMP): The HSSMP shall include but is not limited to:</p> <p>a. Identifying the hazardous substances that will be retained on the site during construction and the restrictions that apply to, and are to be followed, in relation to their storage and use;</p> <p>b. Identifying the potential situations and locations where hazardous substances may be accidentally spilled, and to ensure that the appropriate measures are implemented by the consent holder to ensure that all actual or potential hazardous substances effects arising from the construction activities are minimised. This includes, but is not limited to, measures to provide secondary containment around storage locations and refuelling sites, to minimise the extent of soil contamination and to prevent run-off of spilled liquids from reaching surface water bodies;</p> <p>c. A list of the staff and/or experts responsible for reviewing the HSSMP;</p> <p>d. A description of staff / expert training and induction requirements that will be undertaken to ensure that the HSSMP is followed by all acting in accordance with these resource consents;</p> <p>e. A description of the site and local receiving environment;</p> <p>f. The procedures that are to be followed for the use of the hazardous substances within the construction site, including the construction personnel that are authorised to use them;</p> <p>g. The minimum requirements for spill management kits that are to be distributed throughout the construction site and the procedures that are to apply to the disposal of used spill management materials; and</p> <p>h. The procedures for corrective action in the event of a spill.</p>
12	<p>The consent holder shall take all practicable measures to avoid spills of fuel or any other contaminants. In the event of a spill of fuel or any other hazardous substances, the following corrective action shall be undertaken but is not limited to:</p> <p>a. All practicable measures shall be taken to prevent the spill being discharged into land via the stormwater system;</p> <p>b. The spill shall be cleaned up as soon as practicable and any contaminants that accumulate in the stormwater system shall be removed and the spill</p>

	<p>area shall be inspected and cleaned, and measures shall be taken to prevent reoccurrence;</p> <p>c. The consent holder shall provide the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, with the following information within 24 hours of a spill:</p> <ul style="list-style-type: none"> i. The date, time, location and estimated volume of the spill; ii. The cause of the spill; iii. The type of contaminant(s) spilled; iv. Clean up procedures undertaken including evidence of appropriate disposal; v. Details of the steps taken to control and remediate the effects of the spill on the receiving environment; vi. An assessment of any potential effects of the spill; and vii. Measures to be undertaken to prevent a reoccurrence.
13	Any material, including sediment, hydrocarbons and other contaminants, removed in the exercising of this consent shall be disposed of at a location or facility authorised to receive such material.
	WORKS IN THE RIVER MANAGEMENT PLAN
14	The consent holder shall prepare and adhere to a 'works in the River Management Plan' (WRMP). The WRMP primary objective is to ensure that the appropriate measures, as defined by Canterbury Regional Council's Erosion and Sediment Control Guidelines (2007) Canterbury Regional Council's Erosion and Sediment Control Toolbox for Canterbury are implemented by the consent holder such that all actual or potential riverbed effects arising from the construction and any recurrent maintenance activities are minimised.
15	<p>The WRMP shall include:</p> <ul style="list-style-type: none"> a. Identification of the staff and / or experts responsible for reviewing the WRMP; b. A description of staff training and induction requirements that will be undertaken to ensure that the WRMP is followed by all acting in accordance with these resource consents; c. A description of the site and local receiving environment; d. An assessment of flood events, water levels and their return periods; e. A requirement for the consent holder to monitor the weather throughout the construction of the Proposal and to set the necessary trigger events that are to be used as an early warning system (where work would be ceased and plant removed from the riverbed); and f. A description of how works (including any recurrent maintenance works that are conducted following the first filling of the Klondyke Storage Dam) in the Rangitata River will be managed in order to minimise the risk of adverse environmental effects, and how those effects will be remedied and/or mitigated.
16	A copy of the WRMP shall be provided to the Canterbury Regional Council, attention Regional Leader - Monitoring and Compliance, at least 10 days prior to the activities authorised under this consent commencing.
	ACCIDENTAL DISCOVERY PROTOCOL - ARCHAEOLOGICAL MATERIALS
17	<p>In the event of any discovery of archaeological material the consent holder shall immediately:</p> <ul style="list-style-type: none"> a. Cease work within 10 metres of any part of the discovery and mark off the affected area; b. Advise the Canterbury Regional Council and Ashburton District Council of the discovery; and c. Advise Heritage New Zealand Pouhere Taonga of the discovery.
18	If the archaeological material is determined to be Kōiwi Tangata (human bones) of Māori origin or taonga (treasured artefacts) by Heritage New Zealand Pouhere Taonga, the consent holder shall immediately:

	<ul style="list-style-type: none"> a. Advise the office of Upoko Runanga o Arowhenua of the discovery; b. Consult Upoko Runanga o Arowhenua on any matters of tikanga (protocol) that are required in relation to the discovery and prior to the commencement of any investigation, and perform those requirements; and c. Advise the New Zealand Police of the discovery in relation to Koiwi Tangata (human bones).
19	<p>Iwi representatives, Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager and Heritage New Zealand Pouhere Taonga Trust shall be afforded the opportunity to visit the site within up to three working days of the discovery (if and as they consider it necessary), and such persons shall be given a reasonable time to record and recover archaeological features discovered before work may recommence on the site. The site inspection shall occur within 6 working days of the discovery being made.</p>
20	<p>The consent holder may recommence any work if Heritage New Zealand Pouhere Taonga (following consultation with Kaitiaki Runanga if the material is of Maori origin) provides a statement in writing to the Council that appropriate action has been undertaken in relation to the archaeological material discovered.</p> <p>Advice Notes</p> <ol style="list-style-type: none"> 1. <i>Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Maori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc., may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/koiwi may date to any historic period.</i> 2. <i>It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction. An authority from Heritage New Zealand Pouhere Taonga Trust may be required.</i>
	AFTER WORKS
21	All accumulated debris and other waste material shall be removed from the site.
22	The Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance shall be notified within seven working days after the completion of any works authorised by this consent.
	ADMINISTRATION
23	<p>Pursuant to Section 128(1) of the Resource Management Act 1991, the Consent Authority may serve notice of its intention to review the conditions of this consent within a period of three months commencing on each anniversary of the date of issue of the consent for any of the following purposes:</p> <ul style="list-style-type: none"> a. To deal with any adverse effects on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or b. To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment; or c. To deal with any other adverse effect on the environment on which the exercise of the consent may have any influence.
24	<p>The lapsing date for the purposes of Section 125 of the Resource Management Act 1991 shall be <u>153</u> years from the date consent is issued.</p> <p>Advice note: 'Exercised' is defined as implementing any requirements to operate this consent and undertaking the activity as described in these conditions and/or</p>

	application documents.
<u>25</u>	<u>This resource consent shall expire 35 years after it has commenced.</u>
	<p>Appendix A - list of bird species referred to in bird nesting conditions (5) South Island</p> <p>Pied oystercatcher Black stilt Pied stilt Wrybill Banded dotterel Black-fronted dotterel Blue duck Paradise shelduck Grey duck NZ shoveler Grey teal NZ scaup Black-billed gull Red-billed gull Caspian tern White-fronted tern Black-fronted tern White-winged Black tern Australasian bittern Marsh crake Spotless crake Cormorant/shag colonies Royal spoonbill Crested grebe</p>

CRC182540: to use land for earthworks over an aquifer, to be incorporated within CRC170652

	GLOSSARY OF TERMS & ABBREVIATIONS USED IN THIS RESOURCE CONSENT
0	<p><u>Appropriately qualified and experienced expert(s)</u> means a person or persons:</p> <ul style="list-style-type: none"> a. <u>With a relevant and recognised tertiary qualification(s) to the topic being assessed;</u> b. <u>Whom is (are) recognised as a full member (or equivalent) of a relevant professional institution(s) (such as the Institution of Professional Engineers New Zealand), where such institutions exist;</u> c. <u>Has more than 10-years relevant experience in the topic being assessed;</u> <p><u>and</u></p> <p><u>Certifies and Certification</u> means a process whereby:</p> <ul style="list-style-type: none"> a. <u>The consent holder supplies a report, action plan, design plan, construction methodology, monitoring plan, commissioning plan, safety system or a management plan, and the Canterbury Regional Council appoints an appropriately qualified and experienced expert to assesses the documentation submitted to ensure that it achieves the requirements of the relevant condition(s) of consent;</u> b. <u>Should the documents supplied in accordance with condition 0(a), in the opinion of the expert appointed by the Council, achieve the intent of the relevant condition(s) of these resource consents, the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council shall issue a written certificate to the consent holder confirming that the requirements of the relevant condition(s) have been satisfied;</u> c. <u>If the expert appointed by the Council is not satisfied that the documents supplied in accordance with condition (a) achieves requirements of the relevant condition(s), the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council shall advise (in writing) the consent holder of the experts concerns and ask that the report, commissioning plan, monitoring plan, action plan, safety system or management plan be modified so as to address the concerns, and then be resubmitted;</u> d. <u>This process shall be repeated until the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council is able (on the advice of the expert) to certify that the requirements of the applicable condition(s) of consent have been satisfied; and</u> <p><u>CLG</u> means the Community Liaison Group;</p> <p><u>CMP</u> means Construction Management Plan.</p> <p><u>Construction site</u> includes all areas, excluding gazetted and vested road reserves that contain formed roads, where construction works / activities authorised by these resource consents are being undertaken by the consent holder.</p> <p><u>Council</u> means the Canterbury Regional Council.</p> <p><u>EAP</u> means the Emergency Action Plan;</p> <p><u>ESCP</u> means Erosion and Sediment Control Plan.</p> <p><u>Fish screen</u> means the rotary fish screen and its associated bypass channel.</p> <p><u>FSVMP</u> means Fish Screen Verification Monitoring Plan</p> <p><u>Flood flow take</u> means a flood flow abstraction from the Rangitata River.</p> <p><u>HSSMP</u> means the Hazardous Substances Spill Management Plan</p> <p><u>Klondyke Pond</u> means the Lake Klondyke Water Storage Facility.</p> <p><u>km/hr</u> means kilometres per hour;</p> <p><u>l/s</u> means litres per second</p> <p><u>m³</u> means cubic metres;</p> <p><u>m³/s</u> means cubic metres per second</p> <p><u>m</u> means metre</p> <p><u>m/s</u> means metres per second;</p> <p><u>mm/s</u> means millimetres per second</p> <p><u>NZSOLD</u> means New Zealand Society on Large Dams New Zealand.</p> <p><u>PPV</u> means Peak Particle Velocity</p>

	<p><u>Reasonable Mixing Zone</u> means, for the purposes of condition 18.0A, a reasonable mixing zone extending from the point of discharge from the Sluice Channel to a point that is 200 metres downstream of the discharge point.</p> <p><u>Regional Water Table</u> means the upper surface of the full saturated groundwater system but does not, for the purposes of these resource consents, include perched groundwater (which is groundwater in saturated strata that occurs above the regional water table but is separated from it by a layer of unsaturated strata).</p> <p><u>RDR</u> means the Rangitata Diversion Race.</p> <p><u>RDR mods</u> means the modifications to the Rangitata Diversion Race.</p> <p><u>RL</u> means the right bank when looking downstream.</p> <p><u>RMA</u> means the Resource Management Act</p> <p><u>The Proposal</u> means the Klondyke Dam Pond, WWC, RDR modifications, fish screen, Shepherds Bush Road relocation, flood flow take and refuge, and all incidental work.</p> <p><u>TSP</u> means total suspended particulate.</p> <p><u>WRMP</u> means Works in the River Management Plan</p>
	<u>CERTIFICATION PROCESS</u>
0A.1	<p>Except where explicitly required otherwise by conditions of this consents, the consent holder shall:</p> <ol style="list-style-type: none"> <u>Engage an appropriately qualified and experienced independent expert (or experts) to prepare the management plans, design plans, construction methodology, monitoring plans, action plan, commissioning plan and safety system specified in the conditions of this consent using the draft versions of these plans (which are attached as Annexure B) as a base document;</u> <u>Provide drafts of each of the documents required by condition 0A.1(a) to the Canterbury Regional Council, Attention Regional Leader - Monitoring and Compliance, not less than three months prior to construction works / activities commencing in accordance with these resource consents;</u> <u>Not commence any construction works / activities authorised by these resource consents until it has received a certificate from the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council that the management plan, design plan, construction methodology, monitoring plan, action plan, commissioning plan or safety system is consistent with the applicable conditions of this consent;</u> <u>Adhere to and implement the certified version of the management plan, design plans, construction methodology, monitoring plan, action plan, commissioning plan or safety system;</u> <u>Submit any proposed variations to the management plans, design plans, construction methodology, action plan, safety system, monitoring plans and commissioning plan to the Regional Leader: Compliance and Monitoring of the Canterbury Regional Council, at least seven days prior to when the proposed change will be implemented by the consent holder. Any variations made shall not take effect until the Regional Leader: Compliance & Monitoring of the Canterbury Regional Council certifies that the variations accord with the applicable conditions of the resource consent;</u> <u>Appoint an appropriately qualified and independent expert (or experts) to review the management plans, action plan, safety system, monitoring plans and commissioning plan at the frequency set out in these resource consents. Should the conditions of these resource consents not set a frequency, the reviews shall be conducted annually. Such reviews are to ensure that the management plans, action plan, safety system, monitoring plans and commissioning plan continue to achieve the conditions of these resource consents.</u> <u>Any changes made as a result of the reviews conducted in accordance with condition 0A.1(f) shall be submitted to the Canterbury Regional Council and shall not take effect until the Regional Leader: Compliance</u>

	<p>and Monitoring of the Canterbury Regional Council certifies that the changes accord with the applicable conditions of these resource consents;</p> <p>h. Pay the costs of the expert(s) appointed by the Canterbury Regional Council to certify the management plans, design plans, construction methodology, monitoring plans, commissioning plan, action plan and safety system (and any variations or changes thereto) in accordance with conditions 0A.1(c) and 0A.1(h); and</p> <p>i. Ensure that copies of the certified commissioning plan, design plans, construction methodology and management plans, monitoring plans, action plan, safety system and management plans set out in these conditions are available on site at all times during the construction works / activities authorised by this consent; and</p> <p>j. Ensure that all key personnel are to be made aware of the content and requirements / obligations of the management plans, action plan, safety system, commissioning plan and monitoring plans.</p>
	SCOPE
1	<p>The works shall be limited to the use of land to:</p> <ul style="list-style-type: none"> a. Excavate material; and b. Deposit material <p>for the purposes of and to the extent required for construction of modification of a canal and fish screen area and associated infrastructure on land, on Klondyke Terrace, labelled as the 'Works area' on Plan CRC182540, which forms part of this consent.</p>
1A	<p>The Proposal landuse shall be constructed, operated and maintained in accordance with the details contained within the following documents:</p> <ul style="list-style-type: none"> a. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in July 2016 and entitled "Lake Klondyke: A Proposed Water Storage Facility, Assessment of Environmental Effects Report & Resource Consent Application, Prepared for the Rangitata Diversion Race Management Limited, Date Finalised: July 2016"; and b. The Assessment of Environmental Effects report prepared by Ryder Consulting Limited in November 2017 and entitled "Proposed Rangitata Diversion Race Fish Screen and Supplementary Matters Resource Consent Application". <p>except where modified by specific conditions set out in these this resource consents or by the plans authorised by the building consent for the Proposal.</p>
	PRE-CONSTRUCTION
2	<p>The consent holder shall:</p> <ul style="list-style-type: none"> a. be responsible for all the contracted operations relating to the exercise of this consent including the Construction Works; and b. ensure compliance with consent conditions.
3	<p>Prior to commencement of any physical works required for the activities described in Condition (1) (hereafter referred to as the 'Construction Works') the consent holder or its agent or contractor shall arrange and conduct a pre-construction site meeting between the Canterbury Regional Council and all persons involved in the Construction Works. At a minimum, the following shall be covered at the meeting:</p> <ul style="list-style-type: none"> a. Scheduling and staging of the Construction Works; b. Responsibilities of all relevant parties; c. Contact details for all relevant parties; d. Expectations regarding communication between all relevant parties;

	<ul style="list-style-type: none"> e. Procedures for implementing any changes to the Construction Works; f. Site inspection; and g. Confirmation that all persons involved in the Construction Works have copies of the contents of this consent document, the Erosion and Sediment Control Plan (ESCP) and all plans and methodologies associated with this consent.
4	Erosion and sediment control measures recommended in the ESCP prepared under Condition (5) shall be installed before any excavation occurs on site.
	COMPLAINTS REGISTER
4A.1	<p>The consent holder shall keep a register of complaints lodged with it in respect of the exercise of these resource consents.</p> <p>The register prepared and maintained in accordance with this condition shall record the following details for each complaint that is made:</p> <ul style="list-style-type: none"> a. The date and time of the complaint; and b. The name and contact details of the complainant (if they are provided to the consent holder) and a description of the complaint; and c. The investigations (if any) that the consent holder undertook in response to each complaint; and d. Any action that was undertaken to address the concerns raised in the complaint; and e. The feedback provided to each complainant.
4A.2	The consent holder shall forward a copy of the register prepared and maintained in accordance with condition 4A.1 to the Regional Leader: Monitoring and Compliance Canterbury Regional Council, Attention RMA Compliance and Monitoring Manager within five (5) working days of receiving a request to do so from the Council.
4A.3	The consent holder shall appoint a Liaison Officer for the Proposal prior to any construction works / activities authorised by these this resource consents commencing. The Liaison Officer shall be the point of contact for the public during construction of the Proposal. The name and contact details for the Liaison Officer shall be advertised at the main construction entrance for the Klondyke Storage Dam.
	CONSTRUCTION MANAGEMENT PLAN
4B.1	The purpose of the Construction Management Plan (CMP) is to describe the measures that will be implemented to ensure that all construction related environmental effects are avoided, minimised, or managed in accordance with the conditions of these resource consents and engineering / environmental best practice.
4B.2	<p>The objectives of the CMP are to:</p> <ul style="list-style-type: none"> a. Avoid and / or minimise the magnitude of the adverse effects generated during the construction activities and / or works authorised by these resource consents; and b. Provide clarity as to how the Proposal is to be constructed by setting out the: <ul style="list-style-type: none"> i. Construction methodology that is to be employed to construct the Proposal; and ii. Staging, timing, duration and monitoring of construction works and / or activities; and iii. Measures that are to be applied, and when they are to be applied, to minimise the effects of the construction activities and / or works authorised by these resource consents. These measures shall include:

	<ul style="list-style-type: none"> * <u>A requirement that all construction works / activities be in accordance with the Canterbury Regional Council's ESCG (2007);</u> * <u>Measures necessary to provide for stormwater disposal and sediment removal;</u> * <u>The inclusion and / or maintenance of a vegetated strip (or other treatment system supported by the ESCG) between all areas of earthworks and water courses / water bodies / water races;</u> * <u>Controls on the siting of stockpiles to avoid sediment-entrained runoff entering water races / water courses / water bodies and to reduce the risk of fugitive dust emissions;</u> * <u>Measures to avoid the entrainment of oil, fuels or any other hazardous substances in stormwater, with particular emphasis on re-fuelling areas and repair areas; and</u> * <u>Requirements regarding the stabilisation and maintenance of all construction site entrances associated with the Proposal from public roads; and</u> iv. <u>The means by which stakeholders are to be kept informed of the construction works / activities being undertaken by the consent holder and/or its contractor(s).</u>
4B.3	<p><u>The CMP shall contain the following sections:</u></p> <ul style="list-style-type: none"> a. <u>Purpose and Scope</u> b. <u>Personnel, Team Structure, Contact Details and Responsibilities.</u> <u>This will include the 24-hour contact details for the following personnel:</u> <ul style="list-style-type: none"> i. <u>The administrator of the complaints register (if required by conditions of this consent); and</u> ii. <u>The Liaison Officer (if required by conditions of this consent);</u> c. <u>Environmental Policy and Environmental Management System;</u> d. <u>Resource Consent and Building Consent Requirements;</u> e. <u>Accidental Discovery Protocol (if required by conditions of this consent);</u> f. <u>Environmental Management Sub-Plans including, as a minimum, the following plans:</u> <ul style="list-style-type: none"> i. <u>Erosion and Sediment Control Plan;</u> ii. <u>Hazardous Substances Spill Management Plan;</u> iii. <u>Vibration Management Plan;</u> iv. <u>Waste Management Plan;</u> v. <u>Works in the River Management Plan;</u> vi. <u>Smoke Management Plan;</u> vii. <u>Dust Management Plan; and</u> viii. <u>Contaminated Land Remediation Action Plan</u> g. <u>Construction Methodology;</u> h. <u>Training and Induction of Contractors and their Staff;</u> i. <u>Subcontractor Management;</u> j. <u>Monitoring and Site Inspections;</u> k.- <u>Conformance and Corrective / Preventative Actions;</u> l. <u>Meetings Frequency and Purpose; and</u> m. <u>Environmental Systems Reviews.</u>
	EROSION AND SEDIMENT CONTROL PLAN
5A	<p><u>The purpose of the Erosion and Sediment Control Management Plan is to ensure that the consent holder implements appropriate measures, as defined by the Canterbury Regional Council's Erosion and Sediment Control Guidelines (2007) (an equivalent industry guideline), to minimise all actual or potential erosion and sediment effects arising from the construction works / activities authorised by these resource consents.</u></p>

5	<p>The consent holder shall prepare an ESCP, subject to the following conditions:</p> <ul style="list-style-type: none"> a. No less than one month before the commencement of any Construction Works, a copy of the ESCP shall be submitted to the Canterbury Regional Council: Attention Regional Leader – Monitoring and Compliance for review and certification. All activities authorised by this consent must be carried out in accordance with the ESCP; b. Unless Canterbury Regional Council provides notice in writing that it is unable to certify the ESCP within 20 working days of receipt of a draft ESCP, it is deemed to be certified by the Canterbury Regional Council. For the purposes of this condition, "Certification" means that the ESCP contains all the information specified in Condition 5(c); c. The ESCP shall include: <ul style="list-style-type: none"> i. A list of the staff and / or experts responsible for reviewing the ESCP; ii. A description of staff training and induction requirements that will be undertaken to ensure that the ESCMP is followed by all acting in accordance with these resource consents; iii. A description of the site and local receiving environment; iv. A site drainage plan; v. Details of any anticipated earth excavation requirements; vi. A schedule detailing the anticipated staging of the Construction Works including: <ul style="list-style-type: none"> A. Site preparation works; B. Any equipment or plant mobilisation necessary for carrying out the construction works; C. Any field verification requirement. vii. A detailed description of how run on and run off water will be managed within the construction site; viii. Measures to avoid or minimise any sediment entering exposed groundwater or the Rangitata River or being tracked onto roadways or neighbouring properties; ix. A detailed description of how water will be treated prior to disposal to the various receiving environments; x. Details of compliance checks, and any maintenance necessary to ensure that measures required under the ESCP or this consent are performing effectively; xi. Identification of persons responsible for carrying out the actions within the ESCP including their contact details; and xii. A detailed description of how vegetation stripping and replanting would be undertaken to manage the area of disturbed ground that will be open throughout the construction works / activities authorised by these resource consents. d. The ESCP shall be prepared in accordance with: <ul style="list-style-type: none"> i. Canterbury Regional Council's Erosion and Sediment Control Guidelines (2007) Environment Canterbury's "Erosion and Sediment Control Toolbox for the Canterbury Region" (ESCT) http://esccanterbury.co.nz/; or ii. An equivalent industry guideline. If an alternative guideline is used,

	<p>the SMP shall provide details of the relevant alternative methods used and an explanation of why they are more appropriate than the ESCT.</p> <p>e. Any amendments or revisions to the ESCP must be submitted to Canterbury Regional Council: Attention Regional Leader – Monitoring and Compliance.</p>
6	During construction, all practicable measures shall be undertaken to minimise exposed groundwater.
	AIR QUALITY
6A.1	<p><u>General Controls</u></p> <p><u>The contaminants that may be discharged to air when the consent holder is undertaking works/ activities in accordance with these this resource consents are limited to emissions from the following activities:</u></p> <p>a. <u>Earthworks and activities associated with the construction of the Proposal;</u></p> <p>b. <u>Combustion of diesel to power stationary engines;</u></p> <p>c. <u>Crushing and screening of aggregate;</u></p> <p>d. <u>Concrete batching;</u></p> <p>e. <u>Revegetation of pond surrounds; and</u></p> <p>f. <u>The operation of the Klondyke Pond-Storage Dam.</u></p>
6A.2	<u>There shall be no discharge of dust, smoke or the products of combustion, as a result of the exercise of this consent (either during construction or following the completion of all construction) that is noxious, dangerous, offensive or objectionable beyond the property boundaries of the construction site on which the discharge occurs, and which are not owned by the consent holder.</u>
6B.1	<p><u>Smoke Management Plan</u></p> <p><u>The purpose of the Smoke Management Plan is to describe the procedures to be used to monitor and minimise the effects of smoke generated during the construction of the Klondyke Pond-Storage Dam.</u></p> <p><u>The SMP shall include:</u></p> <p>a. <u>A list of the staff and / or experts responsible for implementing and reviewing the SMP;</u></p> <p>b. <u>A description of the staff training and induction requirements that will be undertaken to ensure that the SMP is followed by all acting in accordance with these resource consents;</u></p> <p>c. <u>A description of the site and the local receiving environment;</u></p> <p>d. <u>A description of the burning methodology that will be employed by the consent holder and its contractors;</u></p> <p>e. <u>A description of the smoke monitoring that will be undertaken when the consent holder undertakes burning activities; and</u></p> <p>f. <u>A description of the weather conditions when burning activities can and cannot take place.</u></p>
6B.2	<p><u>The smoke monitoring required by condition 6B.1 (e) shall, as a minimum, include:</u></p> <p>a. <u>Visual monitoring of the smoke at the downwind boundary of the construction site;</u></p> <p>b. <u>If the visual monitoring conducted in accordance with condition 6B.1 (a) identifies that smoke is visible beyond the boundary of the construction site, visual monitoring at the closest downwind residences; and</u></p> <p>c. <u>Wind speed and direction, as measured by the site meteorological monitoring instruments (installed in accordance with condition 6H.1).</u></p>
6C.1	<p><u>Dust Management Plan</u></p> <p><u>The purpose of the Dust Management Plan is to describe the procedures to be used</u></p>

	<p>to monitor and minimise the effects of dust generated during the construction and operation of the Klondyke Storage Dam Pond in order to comply with conditions 6A.2 and 6D.1 to 6G.2.</p> <p>The DMP shall include:</p> <ol style="list-style-type: none"> A list of the staff and / or experts responsible for implementing and reviewing the DMP; A description of staff training and induction requirements that will be undertaken to ensure that the DMP is followed by all acting in accordance with these resource consents; A description of the site and the local receiving environment; The dust mitigation and prevention methods that will be implemented to achieve condition 6D.1; A description of the dust monitoring (that accords with conditions 6C.3 and 6H.1 to 6H.5) that will be undertaken by the consent holder during the construction works / activities associated with the Proposal; The contingency methods that will be used by the consent holder for controlling dust when the TSP and wind speed alert levels included within conditions 6D.2 to 6D.5 (inclusive) are exceeded.
6C.2	<p>The dust monitoring required by condition this condition shall include, as a minimum:</p> <ol style="list-style-type: none"> Continuous instrumental monitoring of total suspended particulates at one location. The instrument shall be installed and operated at a location that provides a representative sample of the Total Suspended Particulate concentrations at the boundary of the construction site in the immediate vicinity of the closest house to the construction activity associated with the Klondyke Pond Storage Dam; An inspection of all actual and potential dust sources within the construction site at least once per day; and Wind speed and direction, as measured by the site meteorological monitoring instruments (installed in accordance with condition 6H.1 of these resource consents).
6D.1	<p><u>General Dust Mitigation Measures</u></p> <p>The methods used to mitigate and prevent fugitive dust emissions shall include, as a minimum, the following:</p> <ol style="list-style-type: none"> Carrying out earthworks in strips in the construction of the Klondyke Pond Storage Dam, where each strip is no more than 75 hectares in area; That all potentially dusty surfaces (including roads) shall be stabilised using (as necessary) one or more of the following methods: <ol style="list-style-type: none"> water; chemical dust suppressants; compaction; straw mulching; temporary vegetation; gravelling; or other surface modification methods; Existing vegetation is to be retained for as long as practicable and areas where works are complete shall be revegetated as soon as practicable; Vehicle speeds are to be controlled on site to not more than 20 kilometres per hour; The height and slope of stockpiles associated with the Proposal are not to exceed 3 m; Paved roads and yard areas are to be kept clean using either washing or vacuum sweepers; A rumble grid and a sealed area of road of at least 20 metres in length are to be provided prior to all the site exits onto public roads; Drop heights are to be minimised when loading and unloading vehicles; and

	<p>i. <u>An adequate on-site supply of water and equipment for watering all potentially dusty areas of the site shall be provided and maintained at all times.</u></p>
6D.2	<p>The consent holder:</p> <p>a. <u>Shall review dust sources and dust control measures and implement additional dust control methods when TSP concentrations (as measured by the instrument installed and operated in accordance with condition 6H.1):</u></p> <p>i. <u>Exceed a 1-hour average concentration of 200 µg/m³; or</u> ii. <u>Exceed a 24-hour average concentration of 80 µg/m³.</u></p> <p>b. <u>Shall cease the works / activities authorised by these resource consents when TSP concentrations:</u></p> <p>i. <u>Exceed a 1-hour average concentration of 220 µg/m³; or</u> ii. <u>Exceed a 24-hour average concentration of 120 µg/m³.</u></p> <p>c. <u>May only recommence works once TSP concentrations, measured over two consecutive ten-minute periods, are less than 200 µg/m³.</u></p>
6D.3	<p><u>Dust sources and dust control measures shall be reviewed and additional dust control measures shall be implemented when hourly average wind speeds exceed 5 (five) m/s and winds are blowing towards an inhabited dwelling located within 500 m of construction activities and potential sources of dust.</u></p>
6D.4	<p>The additional dust measures referred to in conditions 6D.2 and 6D.3 include, but are not limited to:</p> <p>a. <u>Reducing vehicle speeds within the construction site;</u> b. <u>Increasing the water application rate on dusty surfaces within the construction site;</u> c. <u>Ceasing dusty activities within the construction site, such as the stripping and spreading of topsoil.</u></p>
6D.5	<p><u>Potentially dusty activities that are taking place within 500 m down upwind of an inhabited dwelling shall cease, except for dust mitigation activities, when gust wind speeds (two-minute average or less) exceed 10 m/s during two consecutive ten-minute periods. The term 'potentially dusty activities' means, for the purpose of these resource consents, the following activities:</u></p> <p>a. <u>Stripping of potentially dusty materials such as topsoil and silt;</u> b. <u>Formation of embankments surrounding water storage facilities using soil or silt;</u> c. <u>Formation of soil and silt stockpiles;</u> d. <u>Spreading of topsoil;</u> e. <u>Movement or working of topsoil for the purpose of vegetating the embankments; and</u> f. <u>Placement of the clay for the pond lining.</u></p> <p><u>The potentially dusty activities may recommence when wind gusts (two-minute average or less) are less than 7.5 m/s during the previous two consecutive ten-minute periods.</u></p>
6E.1	<p><u>Concrete Batching Plant Specific Measures</u> <u>The capacity of any concrete batching plant used to construct the Proposal shall not exceed 70 cubic metres per hour.</u></p>
6E.2	<p><u>The consent holder shall take all practicable measures to minimise the discharge of dust from any concrete batching plant used to construct the Proposal. These measures shall include:</u></p> <p>a. <u>The concrete batching plant cement silos are to be fitted with fabric filters to control the discharge of dust during filling and batching operations;</u> b. <u>The cement silo fabric filters are to be regularly maintained in order to</u></p>

	<p><u>maintain effective operation at all times in accordance with the manufacturer's instructions;</u></p> <p><u>c. The cement silos are to be fitted with over-fill warning devices;</u></p> <p><u>d. The filtration system on the cement silos operates at all times when the concrete batching plant is in operation;</u></p> <p><u>e. Aggregates being conveyed to and within the concrete batching plant are to be sprayed with water, as required, to minimise dust emissions;</u></p> <p><u>f. Fine aggregate materials such as crusher dust shall be stored in three sided bins;</u></p> <p><u>g. Cement transferred to trucks from the concrete batching plant is to be via an enclosed control system that collects and treats cement dust; and</u></p> <p><u>h. Any spillages associated with the handling of sand, aggregate or cement materials involved in the batching process shall be cleaned up as soon as practicable following the spill.</u></p> <p><u>i. Cement delivery trucks shall be covered.</u></p>
6F.1	<p><u>Crushing and Screening Specific Measures</u></p> <p><u>The rate of aggregate crushing and screening on site shall not exceed 200 tonnes per hour.</u></p>
6F.2	<p><u>The consent holder shall take all practicable measures to minimise the discharge of dust from crushing and screening aggregates. These measures shall include:</u></p> <p><u>a. Using water sprays on all transfer points and crushing and screening equipment;</u></p> <p><u>b. Wetting of the aggregate as required to reduce the discharge of dust to air; and</u></p> <p><u>c. Minimising 'drop heights' when the aggregates are being unloaded and/or stockpiled.</u></p>
6G.1	<p><u>Post Construction Mitigation Measures</u></p> <p><u>All exposed surfaces of soil on site at the completion of construction shall be stabilised either by being gravelled or planted. The objective of the stabilisation activities is to minimise the generation of dust from the sites where construction works / activities authorised by these resource consents have been undertaken.</u></p>
6G.2	<p><u>The internal banks of the Klondyke Pond Storage Dam shall be kept damp (by the use of measures such as sprinklers on the edge of the Klondyke Pond Storage Dam) when the Klondyke Pond Storage Dam is drawn down below the rock armouring layer and when it is not raining, to prevent the generation of dust.</u></p>
6H.1	<p><u>Air Quality Monitoring</u></p> <p><u>Prior to construction activities commencing on site, the consent holder shall install instruments capable of continuously monitoring and recording:</u></p> <p><u>a. The meteorological conditions, including wind speed, wind direction, rainfall, temperature and relative humidity. These instruments shall be maintained in good working order for the duration of these resource consents; and</u></p> <p><u>b. Total Suspended Particulates.</u></p>
6H.2	<p><u>The monitoring instruments installed in accordance with condition 6H.1(a) shall:</u></p> <p><u>a. Be installed at a height of at least six (6) metres above pre-construction ground level and in accordance with AS 2923- 1987 <i>Ambient Air Guide for Measurement of Horizontal Wind for Air Quality Applications</i>;</u></p> <p><u>b. Commence operating at least one month prior to the commencement of the construction works / activities authorised by these resource consents;</u></p> <p><u>c. Continuously record the meteorological conditions using an electronic data logging system with an averaging time for each parameter of not more than two minutes. The records collected shall be available to the consent holder in 'real time' and the logging system shall be able to send alerts via text message.</u></p>

	The monitoring instruments installed in accordance with condition 6h.1(b) shall be maintained in good working order for the duration of the construction works / activities associated with the Proposal, and shall be located on the south-eastern boundary of the Klondyke Pond, within the vicinity of the closest house to the construction activity
6H.3	The meteorological data recorded in accordance with conditions 6H.1(a) and 6H.2 shall be retained for the duration of these resource consents. Copies of the data shall be provided to the Canterbury Regional Council, Attention: Regional Leader - Compliance and Monitoring, upon request.
6H.4	<p>The TSP monitoring instruments installed in accordance with condition 6H.1(b) shall:</p> <ul style="list-style-type: none"> a. Be a continuous monitoring instrument capable of providing real time data; b. Be of an appropriate standard and quality (and shall include regular calibration of the monitoring equipment) to enable compliance with the TSP trigger levels set in Conditions 6D.2 and 6D.3 to be determined; and c. Continuously record TSP data using an electronic data logging system with an averaging time for each parameter of not more than two minutes. The TSP records shall be available to the consent holder in real time and the logging system shall be able to send alerts via text message.
6H.5	The TSP data recorded in accordance with conditions 6H.1(a) and 6H.3 shall be retained for the duration of the construction works / activities associated with the Proposal. Copies of the data shall be provided to the Canterbury Regional Council, Attention: Regional Leader: Compliance & Monitoring, upon request.
6H.6	<p>The Consent Holder shall prepare a report which summarises the meteorological and TSP monitoring data for the previous 12-month period and provide this to Canterbury Regional Council prior to 1 (March) each year. The summary report shall include the following information:</p> <ul style="list-style-type: none"> a. Hourly and 24-hour average air temperature, wind speed, rainfall and relative humidity for the previous 12 months b. A summary of average, median, maximum and minimum 1 hour results for air temperature, wind speed, rainfall and relative humidity for each month c. A summary of average, median, maximum and minimum 24 hour results for air temperature, wind speed, rainfall and relative humidity for each month d. Hourly and 24-hour average TSP concentrations for the previous 12 months e. A summary of average, median and maximum hourly 1 hour and 24 hour average TSP concentrations for each month f. A summary of the number of exceedances recorded each month of the TSP concentration trigger values included in condition 6D.2 b and an explanation of the possible reason for the exceedance and any corrective actions taken. g. Windroses showing the 1-hour average wind speed and wind direction for each month
CONSTRUCTION	
7	Any imported materials for the Construction Works shall comprise of clean material(s). For the purposes of this consent, 'clean materials' are defined as material not sourced from a site listed on Canterbury Regional Council's Listed Land Use Register and/or Schedule 3 of the Land and Water Regional Plan.
8	No maintenance of vehicles, refuelling or fuel storage shall take place in or within 20 metres of the excavated area, exposed groundwater or any water course.

9	Spoil sites shall be sown with grass within one month of the completion of Construction Works, if completed during period September through April. Should Construction Works be completed outside of this period, the embankments will where necessary to prevent erosion, be stabilised with suitable matting (or equivalent), and sown with grass no later than the following September.
HAZARDOUS SUBSTANCE MANAGEMENT	
10	<p>The consent holder shall prepare a Hazardous Substances Spill Management Plan (HSSMP): The HSSMP shall include but is not limited to:</p> <ol style="list-style-type: none"> Identifying the hazardous substances that will be retained on the site during construction and the restrictions that apply to, and are to be followed, in relation to their storage and use; Identifying the potential situations and locations where hazardous substances may be accidentally spilled, and to ensure that the appropriate measures are implemented by the consent holder to ensure that all actual or potential hazardous substances effects arising from the construction activities are minimised. This includes, but is not limited to, measures to provide secondary containment around storage locations and refuelling sites, to minimise the extent of soil contamination and to prevent run-off of spilled liquids from reaching surface water bodies; A list of the staff and/or experts responsible for reviewing the HSSMP; A description of staff / expert training and induction requirements that will be undertaken to ensure that the HSSMP is followed by all acting in accordance with these resource consents; A description of the site and local receiving environment; The procedures that are to be followed for the use of the hazardous substances within the construction site, including the construction personnel that are authorised to use them; The minimum requirements for spill management kits that are to be distributed throughout the construction site and the procedures that are to apply to the disposal of used spill management materials; and The procedures for corrective action in the event of a spill.
11	<p>The consent holder shall take all practicable measures to avoid spills of fuel or any other contaminants. In the event of a spill of fuel or any other hazardous substances, the following corrective action shall be undertaken, including but not limited to:</p> <ol style="list-style-type: none"> All practicable measures shall be taken to prevent the spill being discharged into land via the stormwater system; The spill shall be cleaned up as soon as practicable and any contaminants that accumulate in the stormwater system shall be removed and the spill area shall be inspected and cleaned, and measures shall be taken to prevent reoccurrence; and The consent holder shall provide the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, with the following information within 24 hours of a spill: <ol style="list-style-type: none"> The date, time, location and estimated volume of the spill; The cause of the spill; The type of contaminant(s) spilled; Clean up procedures undertaken including evidence of appropriate disposal; Details of the steps taken to control and remediate the effects of the spill on the receiving environment;

	<p>vi. An assessment of any potential effects of the spill; and</p> <p>vii. Measures to be undertaken to prevent a reoccurrence.</p>
12	Any material, including sediment, hydrocarbons and other contaminants, removed in the exercising of this consent shall be disposed of at a location or facility authorised to receive such material.
	ACCIDENTAL DISCOVERY PROTOCOL - ARCHAEOLOGICAL MATERIALS
13	<p>In the event of any discovery of archaeological material the consent holder shall immediately:</p> <ol style="list-style-type: none"> Cease work within 10 metres of any part of the discovery and mark off the affected area; Advise the Canterbury Regional Council and Ashburton District Council of the discovery; and Advise Heritage New Zealand Pouhere Taonga of the discovery.
14	<p>If the archaeological material is determined to be Kōiwi Tangata (human bones) of Māori origin or taonga (treasured artefacts) by Heritage New Zealand Pouhere Taonga, the consent holder shall immediately:</p> <ol style="list-style-type: none"> advise the office of Upoko Runanga o Arowhenua of the discovery; consult Upoko Runanga o Arowhenua on any matters of tikanga (protocol) that are required in relation to the discovery and prior to the commencement of any investigation, and perform those requirements; and advise the New Zealand Police of the discovery in relation to Kōiwi Tangata (human bones).
15	<p>Iwi representatives, Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager and Heritage New Zealand Pouhere Taonga Trust shall be afforded the opportunity to visit the site within up to three working days of the discovery (if and as they consider it necessary), and such persons shall be given a reasonable time to record and recover archaeological features discovered before work may recommence on the site. The site inspection shall occur within 6 working days of the discovery being made.</p>
16	<p>The consent holder may recommence any work if Heritage New Zealand Pouhere Taonga (following consultation with Kaitiaki Runanga if the material is of Māori origin) provides a statement in writing to the Council that appropriate action has been undertaken in relation to the archaeological material discovered.</p> <p>Advice Notes</p> <p>1. Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Māori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc., may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/kōiwi may date to any historic period.</p> <p>2. It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction. An authority from Heritage New Zealand Pouhere Taonga Trust may be required.</p>
	ACCIDENTAL DISCOVERY PROTOCOL – WASTE MATERIALS/CONTAMINATED SOILS
17	In the event of encountering visual or olfactory indicators of waste materials and/or soil contamination or an uncontrolled discharge of contaminants the consent holder

	<p>or its contractors shall immediately comply with the Accidental Discovery Protocol (ADP). The ADP for unexpected contaminants shall include but not be limited to the following steps:</p> <ol style="list-style-type: none"> Earthworks within ten metres of unexpected contaminants shall cease immediately; and Immediate steps shall be taken to minimise exposure of the contaminated material, including covering the contaminants with an impervious cover where practicable; and Notification of the Canterbury Regional Council, by a Suitably Qualified and Experienced Practitioner (SQEP), Attention: Contaminated Sites Manager, within 24 hours of the discovery; Earthworks within ten metres of unexpected contaminants shall not recommence until a (SQEP) confirms to Canterbury Regional Council, Attention: Regional Leader-Monitoring and Compliance that it is safe to do so. The consent holder shall take all practicable steps to prevent the contaminated material becoming entrained in stormwater runoff. All records and documentation associated with the discovery shall be kept and copies shall be provided to the Canterbury Regional Council upon request. <p>In the event of encountering visual or olfactory indicators of waste materials and/or soil contamination or an uncontrolled discharge of contaminants the consent holder or its contractors shall immediately comply with the Accidental Discovery Protocol (ADP). The ADP for unexpected contaminants shall comply with the HSSMP.</p>
	DECOMMISSIONING
18	Once the Construction Works have been completed the consent holder shall decommission the sediment and erosion measures required by condition (6) of this consent. Erosion and sediment control measures shall not be decommissioned until the site is stabilised and the stormwater system for the developed site is functioning.
	ADMINISTRATION
19	<p>Pursuant to Section 128(1) of the Resource Management Act 1991, the Consent Authority may serve notice of its intention to review the conditions of this consent within a period of three months commencing on each anniversary of the date of issue of the consent for any of the following purposes:</p> <ol style="list-style-type: none"> To deal with any adverse effects on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment; or To deal with any other adverse effect on the environment on which the exercise of the consent may have any influence.
20	<p>The lapsing date for the purposes of Section 125 of the Resource Management Act 1991 shall be 153 years from the date consent is issued.</p> <p>Advice note: 'Exercised' is defined as implementing any requirements to operate this consent and undertaking the activity as described in these conditions and/or application documents.</p>