

**BEFORE THE CANTERBURY REGIONAL COUNCIL**

**IN THE MATTER OF**

The Resource Management Act 1991

**AND**

**IN THE MATTER OF**

Two applications lodged by Williamson Holdings Limited filed under **CRC041787** and **CRC073113** for land use permits to disturb the bed of the Ahuriri river to install and maintain an intake structure.

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**REPORT AND DECISION OF HEARING COMMISSIONERS PAUL ROGERS,  
MICHAEL BOWDEN, DR JAMES COOKE AND EDWARD ELLISON**

**PART B - SITE SPECIFIC DECISION**

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## **1 INTRODUCTION**

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- 1.1 This is a decision on two applications by Williamson Holdings Limited (the applicant), formerly Southdown Holdings Limited. It is one of many decisions we have made on 104 applications by various applicants for water permits and associated consents in the Upper Waitaki Catchment.
- 1.2 The decision should be read in combination with our Part A decision, which sets out our findings and approach to various catchment wide issues that are common to multiple applications. References to our Part A decision are made throughout this decision as appropriate.

## **2 THE PROPOSAL**

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- 2.1 The applicant proposes to construct, maintain and operate an intake, pipeline, pump station and bund on the bed of Ahuriri River, to facilitate the take of water for WHL Killermont Station ("the WHL Block").
- 2.2 There are two alternatives proposed as "either/or" options. Each option is in a different location based on the alternative intake locations proposed in the applicant's related take and use applications, which are described in detail in a separate decision (CRC041788, CRC073115).
- 2.3 Option 2 is the preferred option by the applicant due to it providing the advantage of gravity feed. However the applicant has retained Option 1 to retain their priority and have indicated that the applications are an "either/or" option. Depending on which if any of the two options is granted the unsuccessful application will be withdrawn.
- 2.4 Both options also involve a temporary diversion of water during construction of the intake structure to minimise the work required in flowing water. Although a consent for this diversion has not specifically been sought, we have considered this activity as part of the proposal for the reasons outlined in our Part A decision.

### **Option 1 – CRC041787**

- 2.5 Option 1 is to construct an intake structure in the bed of the Ahuriri River to facilitate the abstraction of water described in application CRC041788. The intake structure will be located adjacent to the NW boundary of the WHL Killermont block (between NZMS 260 H39:596-285 and H39:599-288) and requires water to be pumped to the irrigation area.
- 2.6 This option involves a pumping station on the south bank of the Ahuriri River (about 3 metres above normal water level) and a pipeline from the pumping station to the irrigation area. Water will be taken via a gravel gallery intake, which is described in more detail in our discussion of the applicant's evidence.
- 2.7 The pipes will supply water to a pump at the foot of the large terrace. The final design of the pumping system had not been completed at the time of the s42A report being completed, but it was envisaged that three pumps with 250 millimetre suction pipes will be used. Each suction pipe will be fitted with a self-cleaning screen with a 5 millimetre mesh. The system will be designed so that the screens can easily be lifted for cleaning and maintenance.
- 2.8 A small section of the top terrace will be excavated and a concrete pump shed will be constructed in the terrace so that pump suction lift requirements are met. The pump house is expected to be about 3 metres above the normal river water level and well above flood level, to house the pumps, hydraulic and electrical control systems for the pumps and pipelines.
- 2.9 The pipeline from the pumping station to the irrigated area will consist of two or three PN6 PVC pipes of approximately 450 – 500 millimetre diameter, buried at least 0.6 metres underground. The pipes will run from the pump station through Killermont land, under

South Highway 8 (the Omārama Lindis Pass Road) and branch out to the centre of each pivot.

### **Option 2 – CRC073113**

- 2.10 Option 2 is an alternative proposal to construct an intake structure in the bed of the Ahuriri River to facilitate the abstraction of water described in application CRC073115. The intake structure will be located approximately 5km upstream from Option 1 (at or about NZMS 260 H39:545-285), and water will be gravity fed to the WHL Block irrigation area.
- 2.11 As for Option 1, water will be taken via a gravel gallery intake. A pipeline will lead to the mainline for the irrigation system on WHL Killermont. This option will pass under SH8 and follow a line parallel with SH8 through Killermont Station to the NW corner of WHL Killermont Station.

### **The application**

- 2.12 The applications are for activities in the bed of a lake or river pursuant to section 13 of the RMA. Consent is required under the Natural Resources Regional Plan (NRRP), as discussed below.
- 2.13 Application CRC041787 (Option 1) was lodged as part of the applicant's original proposal on 27 February 2004, with application CRC073113 (Option 2) being lodged three years later on 23 March 2007. Both applications were publicly notified and there were a number of submissions that are referred to later in this decision. The applications are for new activities and requested a consent duration of 35 years.

### **Modifications after notification**

- 2.14 After notification there were a series of modifications to the proposal. These are described in our decision on the take and use applications (CRC041788, CRC073115) and primarily involved changing to gravel gallery intakes to minimize effects on the environment.
- 2.15 The general principle for modifications after notification is that amendments are allowed provided they do not increase the scale or intensity of the activity or significantly alter the character or effects of the proposal. The key consideration is prejudice to other parties by allowing the change. In this case, we are satisfied that the change does not significantly alter the intensity or effects of the proposal and that no party would be adversely affected by allowing the change.

### **Related consents and applications**

- 2.16 As discussed above, the applicant has applied for related consents to take and use water for irrigation of WHL Block. These applications (CRC041788, CRC073115) are two alternative proposals that correspond with the options discussed in this decision. There is a separate decision provided for these applications.
- 2.17 In addition there were two other applications initially lodged by the applicant. Application CRC073112 related to an erosion control and discharge structure and application CRC073114 provided for the related discharge of water back into the Ahuriri River. Due to the changes to the proposal to include gallery intakes, neither of these applications are required and are not commented on further in this decision. CRC073112 was withdrawn by the applicant on 21 October 2010.

## **3 DESCRIPTION OF THE ENVIRONMENT**

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- 3.1 The Ahuriri River rises in the Barrier Range and is primarily fed by snow melt and rainfall runoff. Below the mountain catchment area, it becomes braided as it passes through the flatter areas between Birdwood and Omārama and down to Lake Benmore.
- 3.2 The median strips along each bank of the Ahuriri River are designated as Department of Conservation Reserves, and a Black Fronted Tern Restoration Programme is situated on

the Ahuriri River.

- 3.3 The applicant advises that at the intake locations the River is approximately 220 metres wide and up to 0.5 metres deep and the river is highly rated for its amenity values, in particular for trout fishing, picnicking, swimming, duck shooting, kayaking, canoeing and rafting.
- 3.4 Ms Vesey, S42A reporter, inspection of the Environment Canterbury's GIS database noted the following points:
- (a) The Ahuriri River is described as a Land of National Significance, a Wetland of Regional Importance (WERI), a Site of Special Wildlife Importance (SSWI),<sup>1</sup> a Recommended Area for Protection, an area of native vegetation and a trout and salmon spawning area.
  - (b) One wetland point, labelled 'unchecked freshwater fish' is located approximately 2.5 kilometres west of the proposed works, within the Ahuriri River (at NZMS 260 H39:5699-2819).
  - (c) Another wetland point, labelled 'unchecked freshwater fish' is located approximately 1.4 kilometres southwest of the proposed intake location (H39:5897-2731), but this is not within the Ahuriri River.
  - (d) Transpower lines cross the Ahuriri River about 500 metres north of the proposed works (about NZMS 260 H39:5408-2897).
  - (e) The River is also listed as an important area of native bird habitat, and is described as a black stilt breeding area.
- 3.5 We flew over the area by helicopter flight, and on the land based visit drove on the public roads that surround the property on the north (SH8), and a segment of the connecting gravel road between SH8 and Broken Hut Road on the southeast side of the block.

## **4 PLANNING INSTRUMENTS**

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- 4.1 The planning instruments relevant to this application are:
- (a) Transitional Regional Plan (TRP);
  - (b) Proposed Natural Resources Regional Plan (PNRRP);
  - (c) Natural Resources Regional Plan (NRRP);
  - (d) Canterbury Regional Policy Statement (CRPS), operative (1998) and proposed (July 2011); and
  - (e) Waitaki District Plan (WDP).
- 4.2 The provisions of these planning instruments critically inform our overall assessment of the applications under s104(1)(b) of the RMA, as discussed in Section 14 of this decision. In addition, the rules within the relevant planning instruments determine the status of the activities, as set out below.

### **Status of the activity**

- 4.3 In our Part A decision we provide a detailed discussion of our approach to determining the status of activities. We now apply that approach to the current applications.

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<sup>1</sup> Not included in any regional planning document. These are classifications developed by the Department of Conservation, and are used as an indicator of areas with some significant ecological value.

#### Option 1 – CRC041787

- 4.4 This application is listed in Schedule 2 of the Resource Management (Waitaki Catchment) Amendment Act 2004. Section 88A of the RMA therefore does not apply and the relevant plan for determining the status of this activity is the operative NRRP.
- 4.5 The relevant provisions of the NRRP are as follows:
- (a) Rule BLR4 – erection or placement and use of structures; and
  - (b) Rule BLR5 - excavation, drilling, tunnelling, depositing, reclamation, drainage or disturbance in, on, under or over the bed.
- 4.6 It is possible that these activities could be carried out to meet the permitted activity criteria however from the information to hand it is not clear that they will. In particular, condition 10 of Rule BLR4 and conditions 2 and 4 of Rule WQL5 are unlikely to be complied with. Option 1 is therefore classified as a discretionary activity under Rule BLR4.

#### Option 2 – CRC073113

- 4.7 Unlike CRC041787, this application is not listed in Schedule 2 of the Waitaki Act. As such, section 88A of the RMA applies, which states that the relevant plans for determining the status of the activity are those that existed at the date the application was lodged. In relation to this application, that was the TRP and the PNRRP.
- 4.8 The TRP is silent on matters relating to works in the bed and banks of rivers and lakes in the Waitaki catchment. This activity therefore requires consent as a discretionary activity under the TRP.
- 4.9 The relevant provisions of PNRRP (as notified) are as follows:
- (a) Rule BLR2 – permits the placement of structures under the bed of a lake, and any excavating, disturbance, planting or removal of plants associated required to undertake the works.
  - (b) Rule BLR3 - classifies activities involving the excavation, drilling, tunnelling or disturbance within the bed as a permitted activity as long as certain conditions are met. These conditions include restrictions on excavation volumes, and set back distances from existing structures and flood protection works, as well as the activity not having an effect on flooding risk or potential, bank stability, the integrity of existing lawfully established structures, or a discharge above a certain threshold. Also, no part of the activity should occur within surface water.
  - (c) Rule BLR8 – classifies the activity as a discretionary activity should it not comply with the conditions of Rules BLR2 and BLR3.
- 4.10 It is possible that the activity may have an effect on bank stability and the integrity of existing lawfully established structures. Furthermore, part of the activities will occur within surface water and may not comply with the specified setback distances. Option 2 is therefore classified as a discretionary activity under Rule BLR8.

#### Temporary Diversion

- 4.11 In relation to the minor diversion of water associated with construction activities, the relevant plan for determining the status of the activity is the WCWARP. The diversion fails to qualify as a permitted activity under Rule 1 of the WCWARP due to the quantity and rate of water being diverted. However it complies with all other relevant rules in the WCWARP and therefore requires consent as a discretionary activity.

## **5 PRELIMINARY MATTERS**

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- 5.1 The proposed works are located within the "protected waters" identified in the Ahuriri Water Conservation Order ("the AWCO"). As such, the activities are subject to the requirements of the AWCO, including retaining the level and quantity of water in its natural state and controls on discharges. In accordance with section 217 of the RMA, we may not grant a consent that is inconsistent with the requirements of the AWCO.
- 5.2 For the reasons discussed throughout this decision, we record that we are satisfied that with appropriate conditions and mitigation, either proposals can proceed without breaching the requirements of the AWCO.

## **6 NOTIFICATION AND SUBMISSIONS**

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- 6.1 Both applications were lodged on 4 August 2007 at the same time as the related take and use applications. Most of the submissions received related to the take and use applications rather than the current disturb the bed applications that are the subject of this decision. These submissions are summarised in our separate decision on the take and use applications.
- 6.2 The only submissions that directly related to the current applications were by Fish and Game New Zealand and Transit New Zealand. These submissions are discussed further below.

## **7 THE SECTION 42A REPORTS**

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- 7.1 A comprehensive officer report on the application and submissions was prepared by the Regional Council's planner Ms Vesey. We were advised the S42A report should be read together with the introductory s42A report which gives an over view of all applications presented (Report 1).
- 7.2 The S42A report was pre-circulated in advance of the hearing, but was based on the original applications rather than the current gravel gallery proposals. As such, the s42A report was principally unrelated to the current gallery options.
- 7.3 We provide some commentary on the S42A report, but defer the principle S42A evidence to the addendum reports that are more specifically related to the gallery intake structures.

### **Effects on man-made structures**

- 7.4 There is an application by Killermont Station to be heard at this hearing (CRC041330) seeking to maintain an existing intake structure in the bed of the Ahuriri River located approximately 2 kilometres downstream of the proposed works for Option 1. In addition, the Killermont Station application for an intake structure CRC041776 is proposed to be located approximately 1.5 kilometres downstream of Option 2. Mitigation measures in regards to flood carrying capacity, erosion and water quality are required to ensure effects on downstream structures are minor.
- 7.5 Ms Vesey also advised us that there is a resource consent CRC010727.1 in the name of Omārama Station Ltd and Tara Hills, located 2 kilometres downstream from Option 1 to carry out maintenance works including reconstruction of an intake structure, and reconstruction of diversion and discharge channels, within the bed of the Ahuriri River. Both options include the installation of irrigation water conveyance pipelines beneath State Highway 8. Transit New Zealand has concerns regarding potential traffic effects created by the construction phase of the proposed works. These could potentially include road closure, which would in turn have significant effects on people. Transit New Zealand has made a submission in opposition on this application regarding these and other effects. Ms Vesey notes she is uncertain of the effects until the submissions have been heard.

### **Effects on other users**

- 7.6 Lands Information NZ made a submission noting that the applicant will require an

easement under section 60 of the Land Act 1948 to undertake works in the bed and riparian area of the Ahuriri River.

### **Effects of bed erosion and flood carrying capacity**

- 7.7 The s42A report was based on the applicant's original water intake structure proposal and not the revised gravel gallery intake proposal for both options. Some of the principal elements of the assessment remain consistent for both options, including that best management practices are implemented, protective works instituted where required to maintain bank stability, minimise disturbance of the river bed and using appropriate and weed free machinery.

### **Effects on tangata whenua**

- 7.8 Ms Vesey noted that an archaeological site labelled as 'Moa-Hunter Camp' is located 300 metres southeast of the proposed location of the works. While it is unlikely that the proposed works will affect this site, it is possible that other sites, presently unidentified, may exist in the area.
- 7.9 It was therefore recommend that a condition relating to the accidental discovery of wāhi tapu and wāhi taonga is attached to both options if granted. In regards potential effects on water quality Ms Vesey considered that they would be minor subject to mitigation.
- 7.10 The location of the proposed works for both options is not within a Statutory Acknowledgement Area or a Silent File Area.

## **8 THE APPLICANT'S CASE**

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- 8.1 Legal counsel for the applicant, Mr Whata presented the opening submissions relating to the applicant's mix of consents, within which the intake structures were included. The expert witnesses whose evidence included briefs relating to the intake structure were as follows:
- (a) Mr Peacocke
  - (b) Mr Ian McIndoe, soil and water engineer
  - (c) Dr Robson, environmental scientist
  - (d) Dr Greg Ryder, freshwater ecologist
  - (e) Ms Ruth Bartlett, botanist
  - (f) Mr John Kyle, planner

### **Opening legal submissions**

- 8.2 Mr Whata addressed the concerns raised in the Officers s42A report, which identified:
- (a) Water quality and ecosystems;
  - (b) Amenity, recreation and other users; and
  - (c) Tangata whenua values.

### **Gallery Intakes**

- 8.3 Mr Whata submitted that the applicant has modified its applications in accordance with expert advice to minimise effects on the environment. On that basis, Mr Whata explained that the applicant would prefer to employ gallery intakes.



- 8.4 This departs from the notified application. However Mr Whata submitted that it remains within jurisdiction for the following reasons:
- (a) the effects of the gallery intakes on the environment are less (though temporary construction effects may be slightly larger in scale for a short period); and
  - (b) persons that might be interested in this aspect are submitters and can address any environmental issues arising.
- 8.5 As much of the main evidence provided by the applicants experts was based on the earlier intake structure designs not considered to meet current design and performance standards we do not dwell on that evidence and focus on the applicants preferred gravel gallery option.

#### Amenity, recreation and other users

- 8.6 The applicant considers that through appropriate construction methodology that the adverse effects on amenity and recreation through sediment will be less than minor and will be limited in duration.

#### Tangata whenua

- 8.7 Mr Whata noted that Ngai Tahu main concerns at the hearing are related to the degradation of water quality and in particular to the Ahuriri Arm and Lower Tekapo River and Haldon Arm of Lake Benmore. He concludes that it is fair to conclude that tangata whenua concerns related to the land use component of the proposal are limited.

#### **Mr Peacocke**

- 8.8 Mr Peacocke gave an over view of the applicant properties that he is a director of including the WHL Block and the capital investment and overall benefits of the proposed activities. Mr Peacocke also explained the extensive consultation process that he and others had been involved in to discuss the proposal with submitters the irrigation proposals.

#### **Mr McIndoe**

- 8.9 Mr McIndoe provided evidence on the now preferred gallery intake structures for the upper intake and lower intake options, noting that whichever of the gravel galleries were granted consent that either would be buried beneath the river channel. It would include 3 screens, each 1000 mm diameter and 60 m long, and would comply with NIWA best practice guidelines to address a number of concerns, including the entrapment of fish.
- 8.10 Option 2 would also include an 800 mm diameter PVC pipe, buried with a minimum 400 mm cover, convey water under gravity adjacent to the Ahuriri River for approximately 700 m, crossing under SH8 at or about H39:553-278, then run parallel to SH8 along Killermont Station land for approximately 3.7 km.
- 8.11 Mr McIndoe stated that the main features of the gallery option was that they were invisible to fish, low approach velocity (0.005-01 m/s), depth of about 2 m to the top of the collector pipe / screen, bed material will form a natural cover and the volume of take will be reduced to 750 l/s.
- 8.12 Mr McIndoe advised that a key feature of the gallery design is that it is buried and natural river bed material remains over the gallery. It therefore becomes part of the natural landscape. It will not affect the flood carrying capacity of the river in any way.
- 8.13 Mr McIndoe outlined the proposed schematic dimensions of the gallery option now preferred in the figures below.

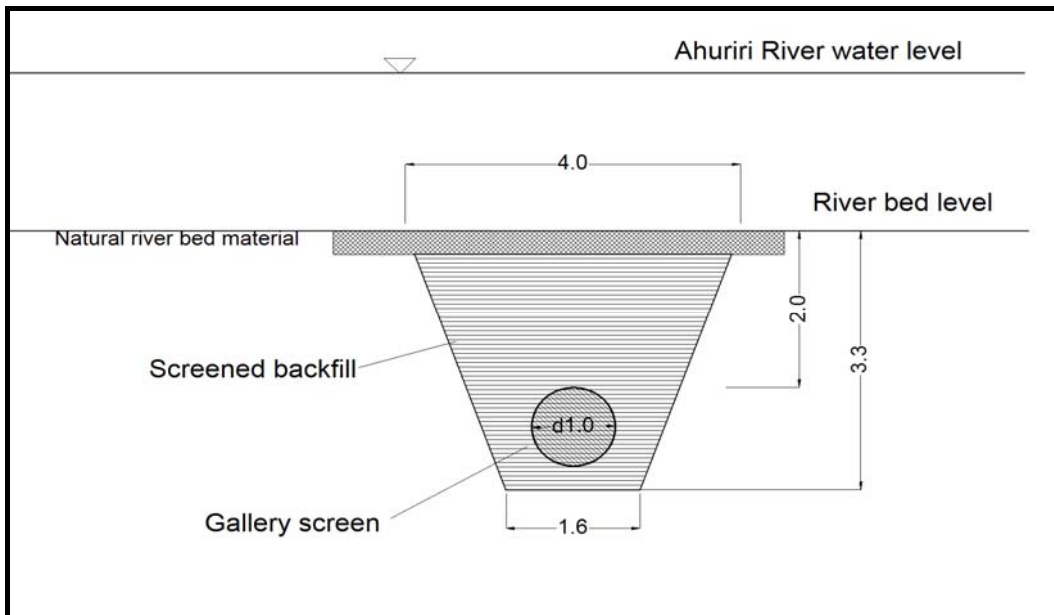


Figure 1: Gallery intake structure for both options

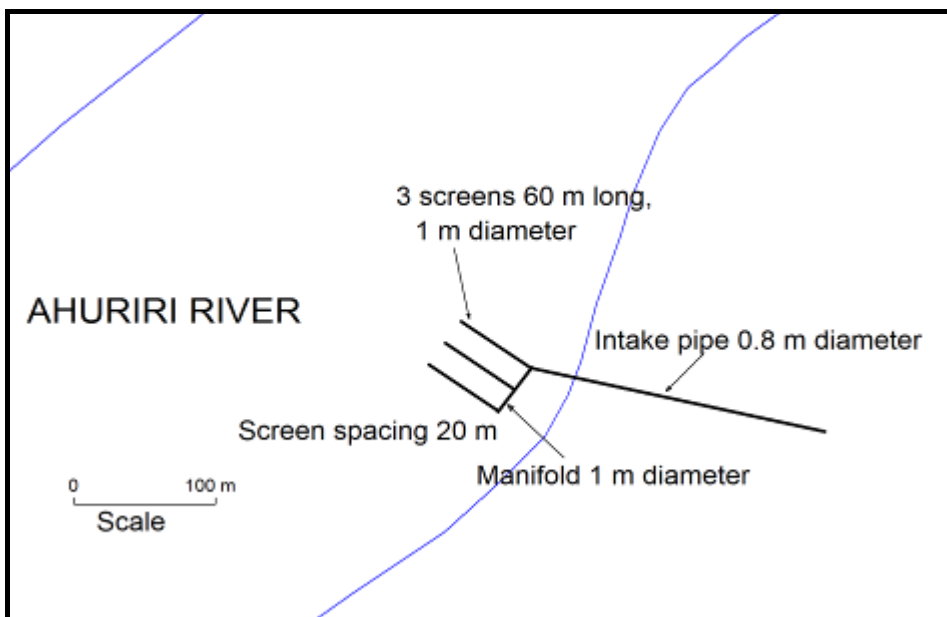


Figure 2: Gallery plan for Option 2, note specifications are the same for the bottom intake.

**Dr Ryder**

Ahuriri River

8.14 Dr Ryder told us that the GHD research had shown that nutrient concentrations in the Ahuriri River are low, and the river appears to be in a "natural state" with respect to nutrients but there is widespread cover of didymo.

### Aquatic ecology

- 8.15 Dr Ryder provided evidence on the fishery of the Ahuriri River, three freshwater fish species have been recorded in the Ahuriri River in the general vicinity of the proposed irrigation take. One species is native; upland bully, with two introduced species; brown and rainbow trout. None of these fish are rare or uncommon. The Ahuriri River is known to support a highly valued sports fishery with good populations of both brown and rainbow trout. Other species recorded in the Ahuriri River, away from the proposed irrigation take, are alpine galaxias, bignose galaxias, lowland longjaw galaxias, Canterbury galaxias and common bully.

### Avifauna ecology

- 8.16 Dr Ryder gave evidence that thirty four different bird species have been identified in the Killermont Station area and surrounds. Fifteen species are introduced, with thirteen native and six endemic species. Species of interest include the black-fronted tern and grey duck, which are listed by DOC as 'Nationally Endangered' and the falcon, which is listed as 'Nationally Vulnerable', although these species are unlikely to be present on land destined for irrigation. Most of the bird species are found predominantly in wetland or farmland habitat, with the exception of bellbird, falcon, grey warbler, fantail and silvereye that prefer native bush.
- 8.17 Dr Ryder told us any construction should take place outside the main avifauna breeding season, i.e.; August to December.
- 8.18 Previous surveys of the wider Ahuriri River area found the area provides important feeding, roosting and breeding habitat for many key bird species, including black stilt, black-fronted tern, wrybill, banded dotterel, black-billed gull, marsh crane, Australasian bittern, Australasian shoveler and New Zealand scaup.
- 8.19 In terms of conservation value, the Ahuriri River represents a highly important habitat for rare and uncommon bird species, and activities associated with it warrant close attention. However, the proposed irrigation land on Killermont Station offers very little in terms of habitat for these species.

### Intake Structure Effects

- 8.20 Dr Ryder considered that the infiltration gallery buried beneath the bed of the Ahuriri River should be effective at safely screening a wide range of fish sizes, including adult and juvenile salmonids. Consequently he stated that he expected the effects on river fisheries to be less than minor.
- 8.21 Dr Ryder considered that the potential effects associated with intake construction include disturbance to local aquatic communities, including macroinvertebrates and fish, and a reduction in downstream water clarity. He recommended that gallery construction take place outside of the peak of the trout spawning and rearing season (approximately June-October).
- 8.22 Dr Ryder stated that a reduction in downstream clarity is almost unavoidable with instream works and so this should be minimised where possible through limiting the period of time machinery is in the water and the area disturbed.
- 8.23 Following gallery construction, surface fine sediments will dissipate downstream with the next fresh. Macroinvertebrates and fish will re-colonise of the area almost immediately with full recovery expected within 4-8 weeks. In general he considered effects associated with gallery construction are short term in nature.
- 8.24 The invasive algae Didymo is present in the Ahuriri River and thorough cleaning of any machinery will therefore be required before machinery enters another waterway.
- 8.25 To control the introduction of weeds to the waterways during construction of the intake,

machinery will be thoroughly washed prior to works being undertaken and after works have been completed to minimise the risk of any weed introduction.

- 8.26 Dr Ryder submitted that Environment Canterbury's best practice guidelines to reduce sediment inputs to water courses during construction should be followed. The gallery intake design should be effective at screening a wide range of fishes including adult and juvenile salmonids, such that effects on lake fisheries will be less than minor.

## **Ms Bartlett**

### Terrestrial ecology

- 8.27 Ms Marie Bartlett gave evidence on the terrestrial ecology of the areas under proposal that the Option 1 intake area had been inundated and covered in new sand and gravel following a large flood 10 days prior to the site visit. Scattered grasses, small willows, bird's foot trefoil, *Juncus articulatus*, briar and scotch thistle (*Cirsium vulgare*) provide a patchy remnant vegetation cover on this disturbed substrate. The buried pipeline would cross the depauperate sparse pasture on the plain above the Ahuriri River.
- 8.28 Ms Bartlett advised us that the option 2 intake location is just upstream of the area where the river swings close to a steep bank. The vegetation on the river bank is almost entirely composed of exotic herbs and grasses with woolly mullein, hawkweed, and browntop. Briar is also scattered amongst this vegetation. The vegetation above the river bank is grazed pasture. The pipeline would be buried along a route above the river bank, cross SH8 onto Killermont Station, and then following the road fence line in an easterly direction to the irrigation area on WHL Killermont.
- 8.29 Ms Bartlett submitted that the Ahuriri River and its floodplain are of ecological significance since they provide habitat for a wide variety of birds and connect the habitats across the plains. The vegetation at the time of the site visit did not support any particular values and the proposed intake sites are upstream of the area recommended for protection as wildlife habitat. If birds begin to use the riverbed at the intake sites then methods will need to be developed to minimise the effects of the construction on them.
- 8.30 A temporary wall (bund) will be constructed from trenched material to create working area and contain sedimentation effects.
- 8.31 Ms Bartlett's evidence describes the vegetation in the vicinity of the fence line along side which the pipeline is to be buried. A mixture of exotic and indigenous tussock grasslands and shrubland comprising briar, matagouri, native broom, mānuka, cocksfoot grass, sweet vernal, birds foot trefoil, fescue tussock, woolly mullein and occasional bracken are found.
- 8.32 Ms Bartlett told us a traditional gravity intake will require construction of the diversion, holding pond and bypass race as well as a tank and mainline irrigation pipe to reach the property. The diversion pond and bypass race would require additional vegetation clearance and earthworks to create them, including works in the bed of the Ahuriri River.
- 8.33 The location of the WHL Killermont underground pumping station depends on the final choice of intake site but the pipeline will be required to cross State Highway 8, either near NZMS 260 H39:598 284 or H39:553 278. For the downstream intake option (Option 1) two pipelines each buried to a depth of 400 mm are proposed, whilst for the upstream intake options (Option 2) one pipeline buried to a minimum depth of 500 mm is proposed.
- 8.34 The construction of the pipeline route would create a ribbon of disturbance along the road edge, across the flats and up the terrace. The surface would be reinstated following the construction of the pipeline and the area sown in similar grasses to those already present.
- 8.35 Ms Bartlett advised us that construction within the river bed and on the banks where the pipeline would cross would need to be undertaken with careful management to minimise the footprint of the activities and ensure the surface is reinstated and rehabilitated to a high standard. Provided this is done the effects of the construction activities can be

expected to be minor, as they are limited in nature and any effects will be localised.

- 8.36 The construction of a holding pond and diversion race to hold water for irrigation is not expected to have any effects on the vegetation of the site beyond clearance of the area required. The pond may provide a small amount of alternative habitat for waterfowl, but given its small size and location near the Ahuriri River this is of limited benefit to waterfowl.
- 8.37 Ms Bartlett recommended that as the time of construction approaches the sites should be surveyed for threatened birds that may be using the area. If threatened birds are found within the riverbed then methods will need to be developed to minimise the effects of the construction on them. The area is known to provide high quality habitat for threatened species.
- 8.38 Ms Bartlett concluded by telling us that the Ahuriri River and its floodplain are of ecological significance since they provide habitat for a wide variety of birds and connect the habitats across the plains. The vegetation at the time of the site visit did not support any particular values and the proposed intake sites are upstream of the area recommended for protection as wildlife habitat. If birds begin to use the riverbed at the intake sites then methods will need to be developed to minimise the effects of the construction on them.

#### **Mr John Kyle**

- 8.39 Mr Kyle provided extensive evidence on the proposed activities including the disturb the bed applications in relation to the relevant statutory planning instruments and Part 2 of the RMA. We concur with the main findings that Mr Kyle makes, as discussed further below

### **9 SUBMITTERS**

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- 9.1 As noted above, most of the submissions related to the "take and use" effects arising from the proposed use of Ahuriri River water, rather than the "land use" use application to construct an intake structure and pipeline. Those submissions directly relevant to these applications are summarised below.

#### **Fish and Game New Zealand**

- 9.2 Mr Webb for Fish and Game New Zealand raised concerns regarding the timing of instream works carried out during the spawning season have the potential to destroy redds (fish spawning nests made in the gravel beds of rivers) by physical disturbance, dewatering or suffocation through siltation. Concern was also raised regarding the protection of sportsfish fry during the incubation and emergence period.
- 9.3 Mr Webb advised us that the Ahuriri River was a very popular angling river with between 3-5000 angler days per year; double that of ten years previously. A principle concern of F&G was the bypass flow applicable to the modified consent CRC041787. Mr Webb argues that the modified consent no longer requires the 200 l/s bypass flow and the take should be reduced to 750 l/s.

#### **Transit New Zealand**

- 9.4 The proposal for both options includes the installation of irrigation pipelines beneath State Highway 8. Transit New Zealand had concerns regarding potential traffic effects created by the construction phase of the proposed works. These could potentially include road closure, which would in turn have significant effects on people.

### **10 UPDATES TO THE SECTION 42A REPORTS**

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- 10.1 Ms Vesey<sup>2</sup> in her addendum noted that the applicant had changed both the downstream and upstream intake options to gallery intakes and that the applicant indicated a

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<sup>2</sup> During the course of these proceedings Ms Vesey married. However, we will continue to refer to "Ms Vesey" throughout.

preference for the upstream option as it allowed for gravity feed of water to the irrigation area.

- 10.2 Ms Vesey considered that the proposed amendment is within the scope of the applications and considered it is unlikely that any further submissions would have been lodged had such a change been included at the time of notification. The particular reason being that the likely long term effects of the galleries will be lesser than those intakes originally sought and submitters have been aware of the change through the hearing process.
- 10.3 Ms Vesey listed the factors which influenced her recommendation to allow for galleries;
- (a) Gallery is the preferred option for the applicant.
  - (b) Less associated infrastructure associated with the gallery (no holding pond, discharge race would be needed as is currently proposed).
  - (c) Would not require ongoing works to reinstate the diversion bar in the river (addresses concern raised by Mr Webb of F&G).
  - (d) Fewer disturbances to the river from variable discharges from the bypass race.
  - (e) Stop bank no longer needed to be built to protect bypass setup.
  - (f) No diversion means it would be within the allocation limits specified in the WCO.
  - (g) Removes concerns raised by Mr Webb (F&G), as to how the applicant would ensure only 950 l/s would be diverted.
- 10.4 Ms Vesey notes that Dr Meredith has reviewed the evidence presented by the applicant and considers that subject to appropriate fish screening guidelines and conditions that the proposed gallery intakes offer more suitable mitigation than the originally proposed intakes and fish screening methods.
- 10.5 Ms Vesey notes that Dr Ryder and Mr Kyle evidence is based on the gallery option and had not provided evidence on the originally applied for intake structures. Mr Kyle was still however using the diversion of 950 l/s in his evidence instead of the 750 l/s for CRC073115 given the fish bypass was no longer required. Mr McIndoe for the applicant had stated that NZTA had advised via MWH that they were satisfied with the proposal to cross under SH8 with a pipeline subject to construction complies with standard conditions of installing the pipeline. Ms Vesey noted that neither the standard nor a copy of the NZTA letter referred to had been provided by the applicant.
- 10.6 Ms Vesey noted that a number of conditions have been proposed by the applicants experts, and that Mr Kyle had incorporated these into condition sets which include;
- (a) The time of construction of the intake structures be extended to ensure works do not occur between 1 June and 31 December of any given year, which addresses the fish spawning and avifauna breeding seasons.
  - (b) That works will not affect recreationalists.
- 10.7 However, Ms Vesey considered there was some variance between the recommended conditions s42A Report 36C, and recommends that the details of Mr McIndoe's figures (28-30) be included to define the scope of the resource consent applications. These details address the works associated with the construction and maintenance of the intake gallery and intake pipe, depth of excavation (3.5 metres), surface area of the excavation (60 metres by 40 metres), and the exact location by grid reference.
- 10.8 Ms Vesey noted that conditions recommended in the S42A Report 36C are still relevant, i.e.; that after allowing for reasonable mixing downstream of proposed works that:

- (a) waters shall not be tainted so as to make them unpalatable, nor contain toxic substances to the extent that it is unsafe for consumption for people and/or farm animals; and
  - (b) no destruction of aquatic life be reason of concentration of toxic substances; and
  - (c) the natural colour of water shall not be conspicuously different.
- 10.9 Ms Vesey also considered that conditions should include reference to avoiding discharge of concrete into the Ahuriri River during construction.
- 10.10 Ms Vesey in her original report was unable to report on a number of aspects relating to the application due to a lack of information. Subsequently Mr Ryder in his main evidence had recommended that construction activity for the intake structure should be carried outside the trout spawning and rearing season of June to October and the avifaunal breeding season of August to December. Mr Ryder also recommended the proposed site be surveyed for threatened bird species prior to construction.
- 10.11 Ms Vesey also noted that neither of the two proposed intake options were located close to existing or proposed water intake structures, the nearest being 1.5 km distance.
- 10.12 Mr Ryder also recommended that the time machinery spends in water or the disturbed land area be limited and that machinery is thoroughly cleaned to prevent spread of didymo.
- 10.13 We note from Dr Meredith's S42A addendum statement (#68-78) that these types of structures require careful scrutiny of design, installation, and maintenance, to ensure adequate performance is maintained. Once installed such installations are (like foundation reinforcing in building construction consents) very difficult to assess or review, so it is appropriate that conditions require explicit demonstration of appropriate construction phases. Demonstrating compliance with the NIWA guidelines should be required on the conditions for this application also.
- 10.14 We also note Dr Meredith in his s42A addendum (#78 refers to the advice he provided to individual s42A reporting officers, which he said is based primarily on the NIWA Report "Fish Screening: Good Practice Guidelines for Canterbury" published in 2007. The guide he notes arose primarily out of the poor and inconsistent state of intake screening on existing and proposed irrigation intakes in Canterbury. While the gravel gallery is more appropriate than the original design that Southdown Holdings Ltd proposed, the greatest unknown with galleries is the ongoing operation and maintenance requirements to maintain structural and operational integrity. It is important Dr Meredith opines to ensure that the conditions require explicit demonstration of appropriate construction phases (by inspection and photographic evidence).

## **11 APPLICANT'S RIGHT OF REPLY**

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### **Mr McIndoe**

- 11.1 Mr McIndoe evidence in his right of reply gave further details around the construction and maintenance of the intake galleries (#26-47) to ensure that the effects are minimised. These further details have also been included in the conditions of consent.
- 11.2 Mr McIndoe also responded to the issues Dr Meredith raised in his s42A addendum in respect of the difficulty of assessing the structural and operational integrity of galleries once they have been installed.
- 11.3 Mr McIndoe stated that galleries have been in use for water supplies for many years, issues are normally related to unusual conditions or proximity to water supplies. Maintenance depends on how well the galleries are designed and operated. He states that galleries do not 'suddenly block'. The structural ability to act as a filter is not threatened, they will continue to operate as a very effective barrier regardless of how blocked they become.

- 11.4 Mr McIndoe said galleries should be conservatively designed with very low entrance velocities to minimise the need for maintenance. Pipelines can be installed in galleries so that compressed air can be used to clean them, if necessary.

#### **Dr Ryder**

- 11.5 Dr Ryder concurred with Dr Freemans (S42A) comments that the revised gallery intakes are now more acceptable and subject to appropriate design, installation, and maintenance scrutiny to ensure fish exclusion performance is maintained. Mr Ryder considered the performance criteria proposed by Ms Vesey to be suitable for inclusion in the conditions.
- 11.6 Dr Ryder commented that Dr Allibone's (DoC) concerns surrounding intake screening for fish appear to relate to cumulative effects, but that he accepts that effects will be less than minor for individual takes. Dr Allibone's concern relate principally he thought to the larval koaro which migrate downstream from headwaters to the lake, they are generally widespread throughout the S.I and migrate in high flows in relation to the ratio of abstraction, such river flow will be high so he does not see the risk of entrainment into galleries as significant under such conditions.

## **12 STATUTORY CONTEXT**

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- 12.1 The relevant statutory context for a discretionary activity is set out in detail in our Part A decision. In accordance with those requirements, we have structured this evaluation section of our report as follows:
- (a) Evaluation of effects
  - (b) Evaluation of relevant planning instruments
  - (c) Evaluation of other relevant s104 matters
  - (d) Part 2 RMA
  - (e) Overall evaluation

## **13 EVALUATION OF EFFECTS**

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- 13.1 Drawing on our review of the application documents, the submissions, the Officers' Reports, the evidence presented at the hearing and our site inspection, we have concluded that the effects we should have regard to are:
- (a) Water quality and ecosystems
  - (b) Flood carrying capacity and erosion
  - (c) Amenity, recreation and other users
  - (d) Landscape effects
  - (e) Tangata whenua values
  - (f) Effects of diversion
  - (g) Positive effects

#### **Water quality and ecosystems**

- 13.2 The principle effects on water quality and ecosystems will be generated during the short period involved in the proposed construction activity of the intake structure. The effects on the water quality of the Ahuriri River would come from sediments created through construction works occurring in the river bed to install the gravel gallery and the proposed



bund designed to divert Ahuriri River water into the location of the gravel gallery.

- 13.3 The short period involved in the Ahuriri River bed works at either option (upper or lower) will contain the sedimentation effects on the water quality of the Ahuriri and instream ecosystems. There is likely to be a short term increase in sediments during construction which will cause fish and some macrophyte taxa to move downstream from the area affected by the works. Mr Ryder submitted that this would be short term and re-colonisation would start almost immediately after construction ceases.
- 13.4 We believe that sediment discharges can be appropriately controlled and mitigated by a comprehensive erosion and sedimentation mitigation plan that is consistent with the Environment Canterbury Erosion and Sediment Control Guidelines (ECAN ESC Guidelines).
- 13.5 We heard from Dr Meredith in his addendum evidence that gravel gallery intakes are preferred to the original proposal put forward by the applicant, but these type of structures require careful scrutiny of design, installation, and maintenance, such that adequate performance is maintained. Mr McIndoe in reply acknowledged that galleries can have operational and maintenance issues but considered these issues are well known and are generally associated with unusual circumstances such that it might affect the water take function but the fish screening capacity will always be effective.
- 13.6 It would seem that the incentive for the applicant to build an effective "water" intake gallery is significant given the related investment at stake. Regardless of how well that objective is achieved it will have little negative impact on the fish screening capacity of the gallery. However proposed conditions of consent that include requiring evidence demonstrating compliance with the ECAN "Fish Screening: Good Practice Guidelines for Canterbury" report will give some assurance that the gravel gallery fish screening structure will meet guideline standards.
- 13.7 The S42A report advocates an exclusion period for construction be extended to avoid the season opening, salmonid spawning and incubation period. Dr Ryder recommended that construction take place outside the avifauna breeding season of August to December, and the trout spawning period of June to October. He described the movement of native fishery away from the area of construction and or sedimentation and an early re-colonisation post construction such that the effects should be minor. Decontamination of equipment to prevent disturbance or spreading of didymo growths during construction should also apply.
- 13.8 The intake structure as described by Mr McIndoe is designed to safely screen a wide range of fish sizes, including adult and juvenile salmonids, consequently the effects on fisheries is expected to be less than minor.
- 13.9 The Ahuriri River and its floodplain are of ecological significance since they provide habitat for a wide variety of birds and connect the habitats across the plains. The proposed intake sites are upstream of the area recommended for protection as wildlife habitat, attention to avifauna values will require the applicant to ensure that the proposed works do not have an effect greater than minor. The completion and acceptance of a Construction Management Plan by Canterbury Regional Council prior to construction commencing will be an important factor in establishing the best practice standards recognised by Canterbury Regional Council and mitigating adverse effects on ecosystems and water quality of the proposed activity to less than minor.

#### **Flood carrying capacity and erosion**

- 13.10 Mr McIndoe advised us that the galleries are buried below the surface of the river and will be covered with natural river gravels, and therefore becomes part of the natural landscape. He submitted that the galleries will not affect the flood carrying capacity of the river in any way.
- 13.11 We note that Mr Scarlett, ECan Senior Engineering Officer, reviewed the original proposal and indicated he did not have any concerns with potential erosion or flood effects with either option provided that conditions 5, 6, 7 and 8 of the commonly used "Land Use

Permits" conditions are included in the conditions.

- 13.12 We consider that provided construction of the gallery is undertaken during low flows and best management practice is adopted to minimise the potential effects of erosion, and the site is restored to a state consistent with the natural surrounding area that the effects on flood carrying capacity and erosion will be minor.

#### **Amenity, recreation and other users**

- 13.13 The potential effects on amenity, recreational and other users would predominantly be through the limited access during the construction period. It is accepted that exclusion from the construction site will be necessary for reasons of safety. The actual period of construction will however be relatively short (2-4 weeks check). The applicant proposes that further mitigation measures include construction occurring during daylight hours and avoiding works on weekends and public holidays.
- 13.14 The modification to burial of the intake structure will result in minimal in riverbed effects, the conveyance pipeline and associated works will leave a temporary visual effect on the landscape due to the slow recovery rate of shrubs and rehabilitation of vegetation in this area. Ms Bartlett advised that the terrestrial values are not rare or threatened such that the small scale and discreet nature of the land works will be minor in effect.

#### **Landscape effects**

- 13.15 In relation to potential landscape effects the construction phase will be short term and evidence of the activity post the construction phase will be confined to the corridor of the pipeline, and the duration of vegetative rehabilitation which will be extended due to the slow plant growth in that part of the Waitaki Upper Basin.
- 13.16 Given the short term duration (2-4 weeks) of the proposed construction work, and that other than the pump house all other aspects of the intake infrastructure will be buried and the area will be rehabilitated that the effects are less than minor.

#### **Tangata whenua**

- 13.17 Ngai Tahu did not lodge a submission specific to this application, although a generic submission opposing all applications in the Mackenzie Basin was lodged by Ngai Tahu. The proposed mitigation measures designed to minimise effects of sedimentation on river and lake waters and ecosystems will also be of benefit to tangata whenua interest.
- 13.18 The inclusion of the condition of an accidental discovery protocol will address the potential for unearthing koiwi or other taonga during earthworks given there is evidence of a moa hunter's site in close proximity to one of the intake structure options.

#### **Effects of diversion**

- 13.19 In respect of the diversion associated with construction of the intake, it is over a short length, will be temporary in nature and returns to the same watercourse it is originally part of. Given the nature of the activity, we are satisfied that the effects will be no more than minor. However we consider that it is necessary to impose some brief conditions of consent to ensure that the extent of the diversion is clearly defined and the activity is managed appropriately.

#### **Positive effects**

- 13.20 The proposed activity has the potential to produce significant positive effect to a large area of the applicant's property through the provision of irrigation water to an otherwise dryland and degraded landscape. The increased pasture and crop production will boost agricultural production and economic returns to the property and the local community.

## Key conclusions on effects

- 13.21 In relation to the actual and potential effects of the proposal, our key conclusions are as follows.
- 13.22 The activity will have a short term effect on water quality due to sedimentation effects on ecosystems and clarity of the Ahuriri River immediately downstream from proposed construction works. Mitigation of effects can be enhanced by timing construction to occur during seasonally low flow periods in the Ahuriri River and by complying with using standards at a time that least effect's the angling, local fishery spawning and incubation period.
- 13.23 The modification of the application to a gravel gallery will result in lower long term effect on the aquatic ecosystems, although the short term effects of the construction phase through sedimentation will be greater with the gallery option.
- 13.24 The effects on access will be short term and can be mitigated by declaring limits on work hours and avoidance of works on public holidays and weekends. Noise and visual effects of the construction activity will be short term, however the landscape effects of a "line" through the vegetation is likely to persist for some time unless effort is applied to re-establishing vegetation cover.
- 13.25 We conclude that the effects of the proposed activity on the amenity and recreational values of the site and on landscape values will be no more than minor.
- 13.26 The adverse effects on the bed, banks, water and ecosystems of the Ahuriri River will be of a short duration, a constant flow will be maintained, at all times, there will be some displacement of fish and macrophytes, however re-colonisation will be immediate.
- 13.27 In conclusion, we find that subject to mitigation measures identified above and the completion of a Sediment Control Plan to be approved by the Canterbury Regional Council prior to start of construction that the temporary activity will ensure the activity will have a less than minor effect on the lake, creek and ecosystems. This will also ensure the effectiveness of the gallery was optimised.

## 14 EVALUATION OF RELEVANT PLANNING INSTRUMENTS

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- 14.1 Under s104(1)(b) RMA, we are required to have regard to the relevant provisions of a range of different planning instruments. Our Part A decision provides a broad assessment of those planning instruments and sets out the approach we have applied to identification and consideration of the relevant provisions. The following part of our decision should be read in combination with that Part A discussion.
- 14.2 In relation to the current applications, we consider that the most relevant and helpful provisions are found in the regional plans, including in particular the NRRP. The following sections of this decision provide our evaluation of the key objectives and policies from the NRRP based on the issues arising for these applications.

### Disturb the bed

- 14.3 The key objectives and policies that are relevant to these applications can be found in Chapter 6 of the NRRP, which relates to activities in the beds of lakes and rivers. The chapter contains one objective and two related policies.
- 14.4 Objective BLR1 aims to ensure that works in the beds and banks of lake, rivers and streams can be undertaken while minimising effects, including flood-carrying capacity, natural character, ecosystems, other structures, erosion, Ngai Tahu values. Given the conclusions we have reached on these matters above, we consider that, subject to appropriate conditions, both options are consistent with this objective.
- 14.5 Policies BLR1 and BLR2 aim to control activities associated with the erection, placement, use and maintenance of structures within the bed of rivers to ensure that Objective BLR1

is achieved. This may include restricting activities so that they do not affect flood carrying capacity, erosion or create plant infestations. For the reasons discussed above, with the imposition of appropriate conditions, we consider both options are consistent with these policies.

#### **Diversion of water**

- 14.6 In respect of the proposed diversion, given its minor nature and our conclusions on effects outlined above, we consider that the activity is consistent with the relevant objectives and policies in the WCWARP seeking to sustain the quality of the environment.

#### **15 EVALAUTION OF OTHER RELEVANT S104 MATTERS**

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- 15.1 Under s104(1)(c) RMA, we are required to have regard to any other matter that we consider to be relevant and reasonably necessary to determine the application. After hearing all the relevant evidence, we consider that no such matters exist in relation to this application.

#### **16 PART 2 RMA**

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- 16.1 Section 104(1) RMA states that the matters which we have discussed above are subject to Part 2, which covers section 5 through section 8 inclusive. These sections are set out in full in our Part A decision and are discussed below in the context of the current applications.

#### **Section 6 – Matters of National Importance**

- 16.2 We consider the short term duration of the proposed activity coupled with the fact that the gallery structure and pipeline will be buried below the surface of the lake bed or land surface will ensure that the natural character of the area will not be compromised.
- 16.3 The removal of a small area of indigenous and exotic vegetation to create an access way for the construction equipment, corridor for the pipeline and site for a pump house will create a visual effect that will be remediated by surface repair and over time by the gradual re-growth of vegetation of the affected area at the end of the construction period.
- 16.4 Access to the area will be restrained during the construction phase of 2-4 weeks, the short duration and avoidance of work at night or public holidays will mitigate this issue.
- 16.5 The proposed mitigation measures to minimise effects on the water quality and ecosystems of the area will also mitigate the potential impact on tangata whenua values for the area.

#### **Section 7 – Other Matters**

- 16.6 The principle of kaitiakitanga has been observed to the extent that the applicant has consulted with Ngai Tahu and sought to understand Ngai Tahu values on the wider issues associated with the take and use of water. Mitigation and best practice standards required for this proposed activity will result in less than minor effects on tangata whenua values.
- 16.7 The ethic of stewardship has been followed with respect to the applicants proposed mitigation measures to minimise the effects on the local waters and ecosystems. The proposal to develop a Construction Management Plan which is to be approved by the Canterbury Regional Council prior to construction further consolidates the principle of stewardship.
- 16.8 The short duration of the activity and measures to mitigate effects on amenity and intrinsic ecosystem values and restoration of the affected area back to as close to original as possible will result in adverse effects being less than minor. However the adverse effect on the amenity values of the public and adjacent property owners will be more than minor due to the intrusion of industrial noise and activity.

- 16.9 The short term effect on the intrinsic ecosystems of the activity and effectiveness of the fish screening mechanism recognises clause (d). The fish screening provided by the gallery will be effective at protecting small fish from entry into the intake structure.
- 16.10 In respect of maintenance and enhancement of the environment, with mitigation, remedial work and natural re-colonisation and vegetative regrowth mean the environment should return to close to its former state within a reasonable period of time and therefore is consistent with clause (f) of section 7.
- 16.11 The lasting impact on the natural and physical resources of the local environment will be less than minor due to the short term duration of the proposed activity, confined corridor for works on land and the burial of the pipeline.
- 16.12 The timing of the construction to avoid opening season, spawning, incubation and the mitigation measures of a temporary bund coupled with the short duration of the construction activity will result in a less than minor effect on the habitat of trout and salmon.

### **Section 8 – Treaty of Waitangi**

- 16.13 Section 8 of the RMA has a cascading effect on the development for regional and district plans in so far as they affect the Upper Waitaki through integration of Ngai Tahu values into the respective objectives and policies. WHL Killermont has consulted with Ngai Tahu, contributed to the development of a cultural impact assessment and the engagement of Mr Buddy Mikaere to assist individual farms with relating the findings to their property. Ngai Tahu made a property inspection, but chose not to have a look at the site of this proposed activity. We consider the mitigation measures proposed including the protection for water, ecosystem and vegetative values will ensure that tangata whenua values are not unduly harmed.

### **Section 5 – Purpose of the RMA**

- 16.14 The applicant has proposed mitigation measures designed to confine effects of sedimentation on lake and river water to a brief period during the construction of a temporary bund.
- 16.15 The intake structure is proposed to be being buried beneath the natural gravels of the bed of the Ahuriri River. Although there is a possibility that the structure might be buried on the beach beside the river if the rate of water infiltration can equal the rate of take required. The mitigation measures proposed and the application of best practice standards will ensure a less than minor effect on the river.
- 16.16 The activity will require the removal of a small area of native vegetation which will have a more lasting visual effect due to the slow regrowth rates of shrubs and tussocks in that environment. Restoration of the disturbed surface area of the construction site and pipeline will be an important mitigation factor, coupled with proactive vegetation restoration will mitigate the long term effects. Ms Bartlett advised us that there were no rare or threatened species in either of the two proposed sites.
- 16.17 Public access and enjoyment of the area will for a short period of time will be restricted during the 2-4 week construction phase. There will be a lingering visual effect as re-vegetation of the area of earth works occurs over time. The adverse effects with remediation measures will be less than minor.

## **17 OVERALL EVALUATION**

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- 17.1 Under s104B of the RMA, we have a discretion as to whether or not to grant consent. This requires an overall judgment to achieve the purpose of the Act and is arrived at by:
- (a) Taking into account all the relevant matters identified under s 104;
  - (b) Avoiding consideration of any irrelevant matters;

- (c) Giving different weight to the matters identified under s 104 — depending on our opinion as to how they are affected by the application of s 5(2)(a), (b), and (c) and ss 6-8 — to the particular facts of the case; and then in light of the above; and
  - (d) Allowing for comparison of conflicting considerations, the scale or degree of conflict, and their relative significance or proportion in the final outcome.
- 17.2 The principle effects of the proposed activity will arise from the construction of the gravel gallery in the Ahuriri River bed and the dispersal of suspended sediments in the vicinity of the works out into the waters of the Ahuriri River. The removal or movement of fish and biota to avoid the effects of sediments will have a localised impact that will be short term in nature and if timed to avoid trout spawning and rearing period will minimise further any effects.
- 17.3 Similarly the modification of the bed of the Ahuriri River and banks to lay a pipeline will have an immediate effect on fish and biota within and below the construction area; sedimentation arising from the construction activity will drift down stream and result in some adverse effect on the local aquatic communities and downstream water clarity. Following construction Dr Ryder advised us that the Macroinvertebrates and fish will re-colonise the area almost immediately with a full recovery in 4-8 weeks, such that the effects associated with gallery construction will be short term in nature.
- 17.4 The duration of the works are relatively short, 2-4 weeks for the intake structure and much less for the pipeline which will be buried parallel to SH8 on its northern side for a distance of approximately 1 km, cross under SH8 and then parallel to SH8 on Killermont Station land for a distance of approximately 3.8 km to the NW corner of WHL Killermont. The requirement for a works plan consistent with the Environment Canterbury Erosion and Sediment Control Guidelines to be approved by Canterbury Regional Council prior to construction will ensure that best practice standards are applied to minimise the erosion and sedimentation effects of constructing gallery in the bed of the Ahuriri River.
- 17.5 The landscape effects will be remediated by the burial below surface level of all pipeline and pumping station infrastructure. The remediation of vegetative cover will be subject to the slow growth patterns of shrubs and native vegetation in that area and will result in a visual effect that will be gradually absorbed into the local landscape vista, such that the adverse effects will be minor.
- 17.6 The adverse effects on amenity and recreational values will be for a short term and affect the angling amenity for a short time.
- 17.7 Having reviewed the application documents, all the submissions, taking into account the evidence to the hearing and taking into account all relevant provisions of the RMA and other relevant statutory instruments we have concluded that the outcome which best achieves the purpose of the Act is to grant consent.

## **18 DECISIONS**


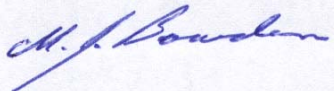

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- 18.1 Pursuant to the powers delegated to us by the Canterbury Regional Council:
- 18.2 For all of the above reasons and pursuant to sections 104 and 104B of the Resource Management Act 1991, we **GRANT** the following applications by Williamson Holdings Limited:
- (a) **CRC041787** – To construct and maintain an intake structure in the bed of the Ahuriri River to facilitate the abstraction of water described in application CRC041788. The intake structure will be located adjacent to the NW boundary of the WHL Killermont block (between NZMS 260 H39:596-285 and H39:599-288) and requires water to be pumped to the irrigation area. The works will involve a temporary diversion of water within the bed of the Ahuriri River at the location of the intake structure.

- (b) **CRC073113** - To construct and maintain an intake structure in the bed of the Ahuriri River to facilitate the abstraction of water described in application CRC073115. The intake structure will be located approximately 5km upstream from Option 1 (at or about NZMS 260 H39:545-285), and water will be gravity fed to the WHL Block irrigation area. The works will involve a temporary diversion of water within the bed of the Ahuriri River at the location of the intake structure.
- 18.3 Pursuant to section 108 RMA, the grant of consent is subject to the conditions specified at **Appendix A** (CRC041787) and **Appendix B** (CRC073113), which conditions form part of this decision and consent.
- 18.4 The duration of these consents shall be until the 30<sup>th</sup> April 2025.

**DECISION DATED AT CHRISTCHURCH THIS 22ND DAY OF NOVEMBER 2011**

Signed by:

Paul Rogers	 _____
Dr James Cooke	 _____
Michael Bowden	 _____
Edward Ellison	 _____

## APPENDIX A: Conditions of Consent (CRC041787)

1. The works shall be limited to:
  - a. The construction, maintenance and use of an intake structure gallery and associated infrastructure;
  - b. Excavation of the Ahuriri River bed to facilitate the works described in (a)  
  
Between map references NZMS 260 H39:596-285 and NZMS 260 H39:599-288, as shown on Plan CRC041787 which forms a part of this consent.
2. Excavation shall not exceed a depth of 3.5 metres below the level of the river bed prior to excavation, nor a surface area of 60 metres by 40 metres.
3. If further excavation at the site in the river bed is not to occur within seven days following the last working at the site, then the following shall occur:
  - a. All deposits of gravel, sand and other natural material shall be levelled to the natural bed level;
  - b. The excavation area shall be reshaped and formed to a state consistent with the surrounding natural river bed.
4. Prior to commencing excavation, a copy of this resource consent shall be given to all persons undertaking activities authorised by this consent.
5.
  - a. Works shall not be carried out on public holidays, nor on public holiday weekends
  - b. Works shall only occur during the hours of 7am to 7pm.
6. All practicable measures shall be undertaken during construction and maintenance to minimise adverse effects on property, amenity values, wildlife, vegetation and ecological values.
7. The consent holder shall ensure that the following procedure is adopted in the event that koiwi (human remains) or taonga (cultural artefacts) are unearthed or are reasonably suspected to have been unearthed during the course of construction and other activities.
  - a. Immediately as it becomes apparent, or is suspected by workers at the site that koiwi or taonga have been uncovered, all activity at the site will cease.
  - b. The plant operator will shut down all machinery or activity immediately, and leave the area and advise his or her supervisor of the occurrence.
  - c. The supervisor shall take steps to immediately secure the area in a way that ensures that koiwi or taonga remain untouched as far as possible in the circumstances and shall notify the consent holder.
  - d. The Project Manager will notify the New Zealand Police (in the case of koiwi) and the relevant runanga representatives that it is suspected that koiwi and/or taonga have been uncovered at the site.
  - e. The runanga representatives will contact the appropriate kaumatua to act on their behalf in this matter in order to guide and advise the consent holder as to the



appropriate course and the consent holder will immediately advise the consent holder of the identity of such kaumatua.

- f. The consent holder shall ensure that representatives on its behalf are available to meet and guide kaumatua and police (as appropriate) to the site, assisting with any requests they may make.
  - g. If the kaumatua are satisfied that the koiwi or taonga are of Maori origin the kaumatua will decide how they are to be dealt with and will communicate its decision to the consent holder, New Zealand Police and such other parties as are considered appropriate.
  - h. Activity on site shall remain halted until the New Zealand Police and the kaumatua have given approval for operations to recommence.
  - i. The consent holder shall ensure that kaumatua are given the opportunity to undertake karakia and such other religious or cultural ceremonies and activities at the site as may be considered appropriate in accordance with tikanga Maori (Maori custom and protocol).
8. Erosion controls shall be installed on all earthworks to prevent sediment from flowing into any surface water body.
  9. Works shall not be undertaken in any manner likely to cause erosion of or instability to, the banks or bed of the Ahuriri River; or reduce the flood-carrying capacity of the waterway.
  10. The consent holder shall adopt the best practicable options to:
    - a. Minimise soil disturbance and prevent soil erosion;
    - b. Prevent sediment from flowing into any surface water; and
    - c. Avoid placing cut or cleared vegetation, debris, or excavated material in a position such that it may enter surface water.
  11. The consent holder shall ensure that construction of the intake does not occur during the period of 1 June to 14 November inclusive, in any one year.
  12. At least 20 working days prior to the commencement of the works, the consent holder shall submit to the Canterbury Regional Council, Attention: RMA Enforcement and Compliance Manager an Erosion and Sediment Control Plan (ESCP) that includes, but is not limited to the following:
    - a. a locality map; and
    - b. detailed drawings showing the type and location of erosion and sediment control measures, on-site catchment boundaries, and off-site sources of run-off; and
    - c. drawings and specifications of all designated erosion and sediment control measures with supporting calculations; and
    - d. a programme of works, which includes but is not limited to a proposed timeframe for the works;
    - e. a schedule of inspections and maintenance of erosion and sediment control measures; and
    - f. details of when the erosion and sediment control measures are to be established and decommissioned; and

- g. measures to ensure that there is no tracking of mud or earth onto the surrounding road network, including the provision of shaker ramps and/or wheel washes where appropriate; and
  - h. measures to be undertaken should erosion and sediment control measures fail and result in contamination of any watercourse or water body.
- 13. The ESCP shall be prepared in general accordance with the Environment Canterbury Erosion and Sediment Control Guidelines 2007 (ECAN ESC Guidelines).
- 14. The ESCP shall be communicated to all persons undertaking activities authorised by this consent and a copy of the ESCP shall be kept on site at all times.
- 15. The Erosion and Sediment Control Plan and any revisions of that document shall be submitted to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager for certification that the Erosion and Sediment Control Plan meets all the requirements of the conditions of this consent.
- 16. No activities authorised by this consent shall commence or be undertaken other than in full compliance with an Erosion and Sediment Control Plan that has been certified by or on behalf of the Canterbury Regional Council RMA Compliance and Enforcement Manager in terms of condition 12.
- 17. The Canterbury Regional Council (Attention: RMA Compliance and Enforcement Manager) shall be notified not less than three working days prior to commencement of the works described in condition 1.
- 18. Prior to any construction works being carried out in the period 1 September to 1 February, the consent holder shall ensure that:
  - a. a suitably qualified and independent person inspects the proposed area of works, no earlier than eight working days prior to any works being carried out, and locates any bird breeding sites of birds listed in Schedule A;
  - 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;
  - 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 10 days, the site will be re-inspected for bird breeding and nesting sites in accordance with parts (a) to (d) of this condition.
- 19. The consent holder shall ensure that no construction or maintenance work is undertaken within 100m of any bird breeding or nesting sites as identified in accordance with condition 19.
- 20. Any maintenance works that require bed disturbance in flowing water should be avoided in the first two weeks of November and outside that period Fish and Game should be consulted prior to any works.
- 21. To prevent the spread of Didymo or any other aquatic pest, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures.

Note: You can access the most current version of these procedures from the Biosecurity New Zealand website <http://www.biosecurity.govt.nz> or Environment Canterbury Customer Services.

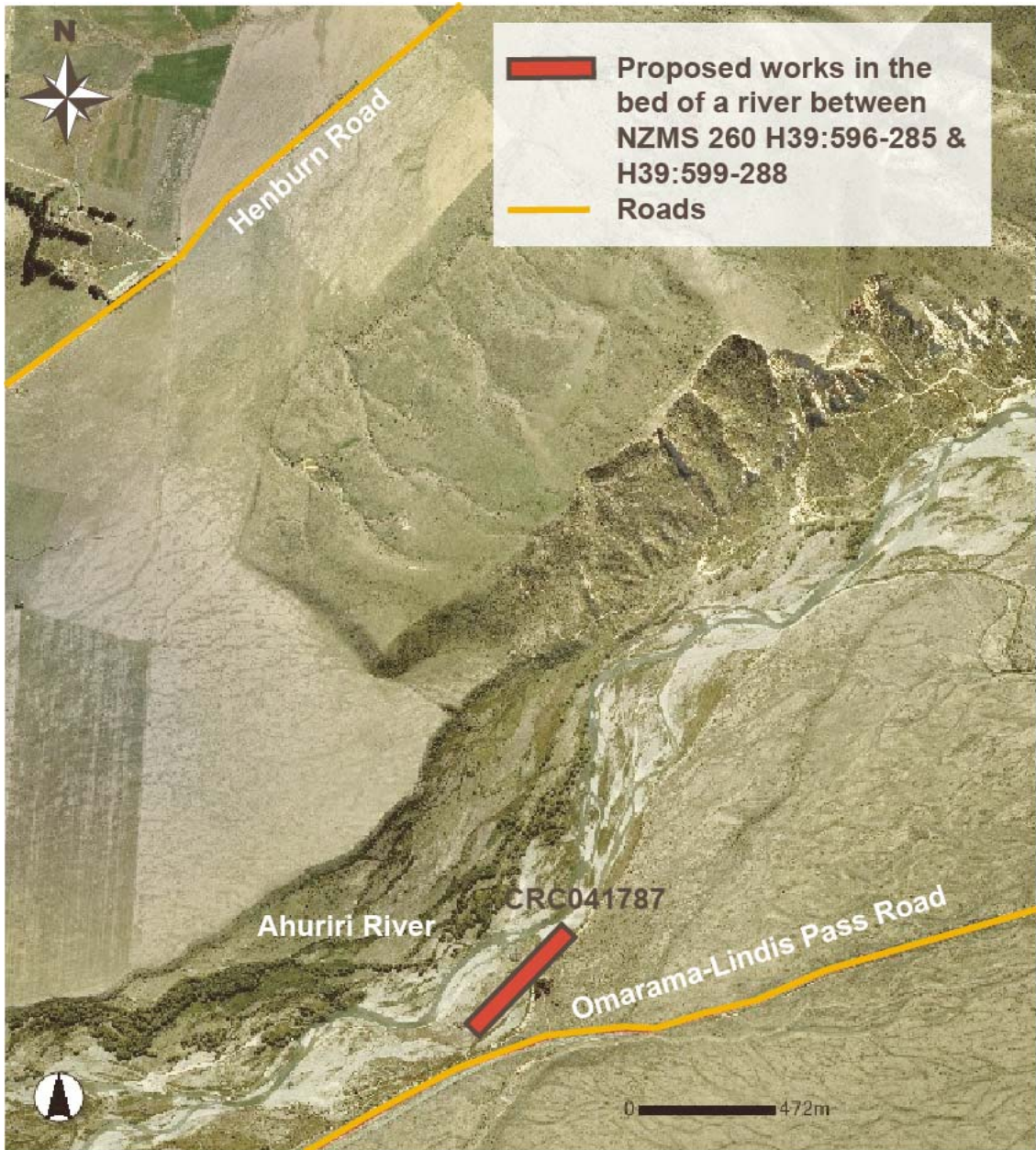
22. The consent holder shall ensure that during construction:
  - a. All practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery.
  - b. There shall be no storage of fuel or refuelling of vehicles and machinery within 20 metres of the bed of a river.
  - c. Fuel shall be stored securely or removed from site
23. The consent holder shall ensure that works do not prevent the passage of fish, or cause the stranding of fish in pools or channels.
24. The consent holder shall ensure that machinery shall be free of plants and plant seeds prior to use in the waterbody.
25. Upon completion all disturbed areas outside the lake or river bed shall be stabilised and revegetated with similar species to those found in the intermediate vicinity of the particular site following completion of the works.
26. Upon completion all spoil and other waste material from the works shall be removed from site on completion of works.
27.
  - a. The consent holder shall ensure that if water is abstracted the gallery and, or, intake shall be designed to prevent native and exotic fish species from entering the system.
  - b. The fish screen shall be designed by a person with experience in freshwater ecology and fish screening techniques, and constructed in a manner that ensures the principals of the NIWA fish screening guidelines (Fish Screening: Good Practice Guidelines for Canterbury, NIWA Client Report 2007-092, October 2007, or other revision of these guidelines. (Copy available on [www.ecan.govt.nz](http://www.ecan.govt.nz))) are achieved.
  - c. No water may be taken in terms of this permit until, upon completion of the intake structure a report is provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager. The report shall be prepared by the consent holder for certification and shall demonstrate compliance with the following:
    - i. Design plan for the gallery specifying gallery dimensions;
    - ii. Detail of depths and sizes of layers of gravel over the gallery;
    - iii. Photographic evidence of key stages of construction of the gallery, including demonstrating compliance with gravel specifications in sub clause (c)(ii) above;
    - iv. Any ongoing maintenance required by the manufacturer is carried out in accordance with their specifications."
  - d. The intake structure shall be maintained in good working order. Records shall be kept of all inspections and maintenance. And those records shall be provided to the Canterbury Regional Council upon request.

28. Water shall only be temporarily diverted within the bed of the Ahuriri River for the purpose of installation and maintenance of an intake structure, installed and maintained in accordance with this consent (CRC041787).
29. The diversion of water referred to in Condition 28 shall only occur over a maximum reach of 50 metres between map references NZMS 260 H39:596-285 and NZMS 260 H39:599-288.
30. The diversion of water shall not impede fish passage or cause the stranding of fish in pools or channels.
31. For the period of diversion, all water diverted shall remain within the bed.
32. When diversion ceases, water shall be returned to its original course.
33. The Canterbury Regional Council may once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent, pursuant to Section 128 of the RMA, for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage.
34. The lapsing date for the purposes of section 125 shall be 31<sup>st</sup> December 2016.

**Advice note:**

Nothing in this consent authorised the taking and use of water for irrigation purposes. A separate consent is required from the Canterbury Regional Council for this activity.

Plan CRC041787



Schedule A (CRC041787) – list of bird species

South Island Pied Oystercatcher

Black Stilt

Pied Stilt

Wrybill

Banded Dotterel

Black-fronted Dotterel

Grey warbler

Fantail

Bellbird

Silvereye

Spur-winged Plover

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

Or any other bird species deemed by a suitably qualified person to require protection.

## APPENDIX B: Conditions of Consent (CRC073113)

1. The works shall be limited to:
  - a. The construction, maintenance and use of an intake structure gallery and associated infrastructure;
  - b. Excavation of the Ahuriri River bed to facilitate the works described in (a)  
  
At map reference NZMS 260 H39:545-285, as shown on Plan CRC041787 which forms a part of this consent.
2. Excavation shall not exceed a depth of 3.5 metres below the level of the river bed prior to excavation, nor a surface area of 60 metres by 40 metres.
3. If further excavation at the site in the river bed is not to occur within seven days following the last working at the site, then the following shall occur:
  - a. All deposits of gravel, sand and other natural material shall be leveled to the natural bed level;
  - b. The excavation area shall be reshaped and formed to a state consistent with the surrounding natural river bed.
4. Prior to commencing excavation, a copy of this resource consent shall be given to all persons undertaking activities authorised by this consent.
5.
  - a. Works shall not be carried out on public holidays, nor on public holiday weekends;
  - b. Works shall only occur during the hours of 7am to 7pm.
6. All practicable measures shall be undertaken during construction and maintenance to minimise adverse effects on property, amenity values, wildlife, vegetation and ecological values
7. The consent holder shall ensure that the following procedure is adopted in the event that koiwi (human remains) or taonga (cultural artefacts) are unearthed or are reasonably suspected to have been unearthed during the course of construction and other activities.
  - a. Immediately as it becomes apparent, or is suspected by workers at the site that koiwi or taonga have been uncovered, all activity at the site will cease.
  - b. The plant operator will shut down all machinery or activity immediately, and leave the area and advise his or her supervisor of the occurrence.
  - c. The supervisor shall take steps to immediately secure the area in a way that ensures that koiwi or taonga remain untouched as far as possible in the circumstances and shall notify the consent holder.
  - d. The Consent Holder will notify the New Zealand Police (in the case of koiwi) and the relevant runanga representatives that it is suspected that koiwi and/or taonga have been uncovered at the site.
  - e. The runanga representatives will contact the appropriate kaumatua to act on their behalf in this matter in order to guide and advise the consent holder as to the

appropriate course and the consent holder will immediately advise the consent holder of the identity of such kaumatua.

- f. The consent holder shall ensure that representatives on its behalf are available to meet and guide kaumatua and police (as appropriate) to the site, assisting with any requests they may make.
  - g. If the kaumatua are satisfied that the koiwi or taonga are of Maori origin the kaumatua will decide how they are to be dealt with and will communicate its decision to the consent holder, New Zealand Police and such other parties as are considered appropriate.
  - h. Activity on site shall remain halted until the New Zealand Police and the kaumatua have given approval for operations to recommence.
  - i. The consent holder shall ensure that kaumatua are given the opportunity to undertake karakia and such other religious or cultural ceremonies and activities at the site as may be considered appropriate in accordance with tikanga Maori (Maori custom and protocol).
8. Erosion controls shall be installed on all earthworks to prevent sediment from flowing into any surface water body.
  9. Works shall not be undertaken in any manner likely to cause erosion of or instability to, the banks or bed of the Ahuriri River; or reduce the flood-carrying capacity of the waterway
  10. The consent holder shall adopt the best practicable options to:
    - a. Minimise soil disturbance and prevent soil erosion;
    - b. Prevent sediment from flowing into any surface water; and
    - c. Avoid placing cut or cleared vegetation, debris, or excavated material in a position such that it may enter surface water.
  11. The consent holder shall ensure that construction of the intake does not occur during the period of 1 June to 14 November inclusive, in any one year.
  12. At least 20 working days prior to the commencement of the works, the consent holder shall submit to the Canterbury Regional Council, Attention: RMA Enforcement and Compliance Manager an Erosion and Sediment Control Plan (ESCP) that includes, but is not limited to the following:
    - a. a locality map; and
    - b. detailed drawings showing the type and location of erosion and sediment control measures, on-site catchment boundaries, and off-site sources of run-off; and
    - c. drawings and specifications of all designated erosion and sediment control measures with supporting calculations; and
    - d. a programme of works, which includes but is not limited to a proposed timeframe for the works;
    - e. a schedule of inspections and maintenance of erosion and sediment control measures; and
    - f. details of when the erosion and sediment control measures are to be established and decommissioned; and



- g. measures to ensure that there is no tracking of mud or earth onto the surrounding road network, including the provision of shaker ramps and/or wheel washes where appropriate; and
  - h. measures to be undertaken should erosion and sediment control measures fail and result in contamination of any watercourse or water body.
- 13. The ESCP shall be prepared in general accordance with the Environment Canterbury Erosion and Sediment Control Guidelines 2007 (ECAN ESC Guidelines).
- 14. The ESCP shall be communicated to all persons undertaking activities authorised by this consent and a copy of the ESCP shall be kept on site at all times.
- 15. The Erosion and Sediment Control Plan and any revisions of that document shall be submitted to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager for certification that the Erosion and Sediment Control Plan meets all the requirements of the conditions of this consent.
- 16. No activities authorised by this consent shall commence or be undertaken other than in full compliance with an Erosion and Sediment Control Plan that has been certified by or on behalf of the Canterbury Regional Council RMA Compliance and Enforcement Manager in terms of condition 12.
- 17. The Canterbury Regional Council (Attention: RMA Compliance and Enforcement Manager) shall be notified not less than three working days prior to commencement of the works described in condition 1.
- 18. Prior to any construction works being carried out in the period 1 September to 1 February, the consent holder shall ensure that:
  - a. a suitably qualified and independent person inspects the proposed area of works, no earlier than eight working days prior to any works being carried out, and locates any bird breeding sites of birds listed in Schedule A;
  - 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;
  - 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 10 days, the site will be re-inspected for bird breeding and nesting sites in accordance with parts (a) to (d) of this condition.
- 19. The consent holder shall ensure that no construction or maintenance work is undertaken within 100m of any bird breeding or nesting sites as identified in accordance with condition 19.
- 20. Any maintenance works that require bed disturbance in flowing water should be avoided in the first two weeks of November and outside that period Fish and Game should be consulted prior to any works.
- 21. To prevent the spread of Didymo or any other aquatic pest, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures.

Note: You can access the most current version of these procedures from the Biosecurity New Zealand website <http://www.biosecurity.govt.nz> or Environment Canterbury Customer Services.

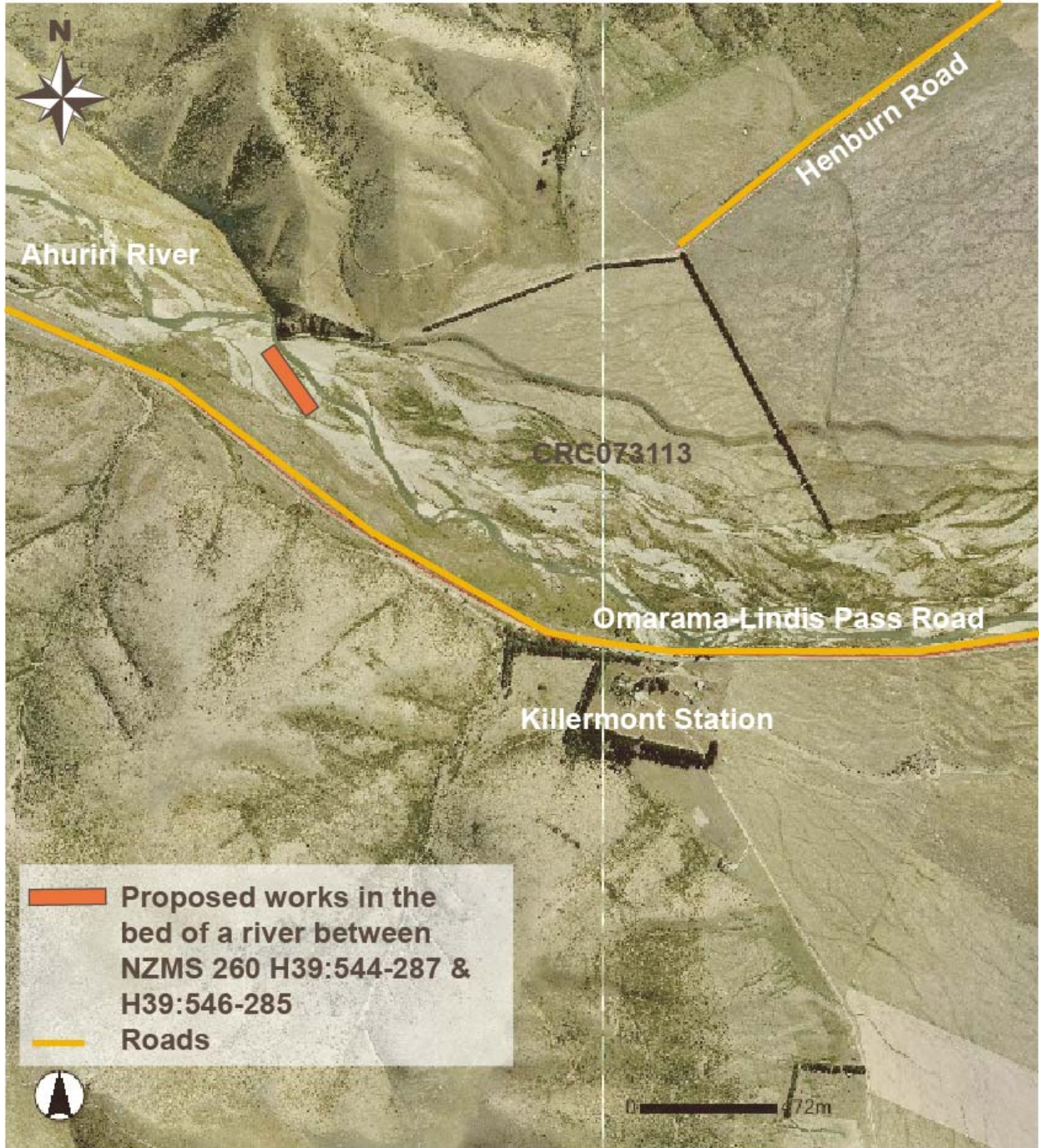
22. The consent holder shall ensure that during construction:
  - a. All practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery.
  - b. There shall be no storage of fuel or refuelling of vehicles and machinery within 20 metres of the bed of a river.
  - c. Fuel shall be stored securely or removed from site overnight.
23. The consent holder shall ensure that works do not prevent the passage of fish, or cause the stranding of fish in pools or channels.
24. The consent holder shall ensure that machinery shall be free of plants and plant seeds prior to use in the waterbody.
25. Upon completion all disturbed areas outside the lake or river bed shall be stabilised and revegetated with similar species to those found in the intermediate vicinity of the particular site following completion of the works.
26. Upon completion all spoil and other waste material from the works shall be removed from site on completion of works.
27.
  - a. The consent holder shall ensure that if water is abstracted the gallery and, or, intake shall be designed to prevent native and exotic fish species from entering the system.
  - b. The fish screen shall be designed by a person with experience in freshwater ecology and fish screening techniques, and constructed in a manner that ensures the principals of the NIWA fish screening guidelines (Fish Screening: Good Practice Guidelines for Canterbury, NIWA Client Report 2007-092, October 2007, or other revision of these guidelines. (Copy available on [www.ecan.govt.nz](http://www.ecan.govt.nz))) are achieved.
  - c. No water may be taken in terms of this permit until, upon completion of the intake structure a report is provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager. The report shall be prepared by the consent holder for certification and shall demonstrate compliance with the following:
    - i. Design plan for the gallery specifying gallery dimensions;
    - ii. Detail of depths and sizes of layers of gravel over the gallery;
    - iii. Photographic evidence of key stages of construction of the gallery, including demonstrating compliance with gravel specifications in sub clause (c)(ii) above;
    - iv. Any ongoing maintenance required by the manufacturer is carried out in accordance with their specifications."
  - d. The intake structure shall be maintained in good working order. Records shall be kept of all inspections and maintenance. And those records shall be provided to the Canterbury Regional Council upon request.

35. Water shall only be temporarily diverted within the bed of the Ahuriri River for the purpose of installation and maintenance of an intake structure, installed and maintained in accordance with this consent (CRC073113).
36. The diversion of water referred to in Condition 35 shall only occur over a maximum reach of 50 metres at map reference NZMS 260 H39:545-285, as shown on Plan CRC041787 which forms a part of this consent.
37. The diversion of water shall not impede fish passage or cause the stranding of fish in pools or channels.
38. For the period of diversion, all water diverted shall remain within the bed.
28. When diversion ceases, water shall be returned to its original course
29. The Canterbury Regional Council may once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of this consent, pursuant to Section 128 or the RMA, for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage.
30. The lapsing date for the purposes of Section 125 of the RMA is 31<sup>st</sup> December 2016.

**Advice note:**

Nothing in this consent authorised the taking and use of water for irrigation purposes. A separate consent is required from the Canterbury Regional Council for this activity.

Plan CRC073113



Schedule A (CRC073113) – list of bird species

South Island Pied Oystercatcher

Black Stilt

Pied Stilt

Wrybill

Banded Dotterel

Black-fronted Dotterel

Grey warbler

Fantail

Bellbird

Silvereye

Spur-winged Plover

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

Or any other bird species deemed by a suitably qualified person to require protection.