FILE NOTE

Document Reference: A1402785

File: RM19.151

From: Byron Pretorius, Team Leader Compliance Central

Shannen Barns, Environmental Officer

Date: 22 October 2020

RE: Royal Burn water take investigation re RM19.151.01 Water Permit

application

BARNS and PRETORIUS conducted a water take investigation along the Royal Burn on 20 October 2020. In response to the Water Permit applications under RM19.151.

The following file note has been produced to report on the various permitted activity takes found downstream of the proposed RM19.151 points of take, extending downstream to the confluence of the Royal Burn and the Arrow River.

Point of take location 1: NZTM E1274976 N5011533

387 CROWN RANGE ROAD ARROW JUNCTION 9371 - Lot 1 DP 445855

Water is abstracted from the Royal Burn in a non-consumptive manner to supply an ornamental pond with water. The ornamental pond discharges back to the Royal Burn approximately 50 metres downstream from the abstraction.

At the time of inspection, PRETORIUS did not suspect that more than 1 litre per second was able to be abstracted.

Point of take location 2: NZTM E1274844 N5011424

387 CROWN RANGE ROAD ARROW JUNCTION 9371 - Lot 1 DP 445855

A Certificate of Compliance has been applied for regarding this *Lofts Water Limited* abstraction. The water users have stated that they have installed a restrictor valve limiting their rate of take to comply with the permitted rate and volume.

Point of take location 3: NZTM E1274602 N5011075

18 JEFFERY ROAD ARROW JUNCTION 9371 - Part Lot 1 DP 409021

A domestic permitted activity take was found in this location, where a small diesel pump was located close to the waterway. BARNS and PRETORIUS confirmed that water was abstracted to a tank that supplies a dwelling with water. The pipe diameters were approximately 20mm, reflecting that an abstraction of more than 1 litre per second is unlikely.

Be mindful that this landowner also receives water from the Lofts Water Limited supply, essentially being supplied water under two permitted activity takes along the Royal Burn.

Point of take location 4: NZTM E1274439 N5011053

30 JEFFERY ROAD ARROW JUNCTION - Lot 1 DP 480390

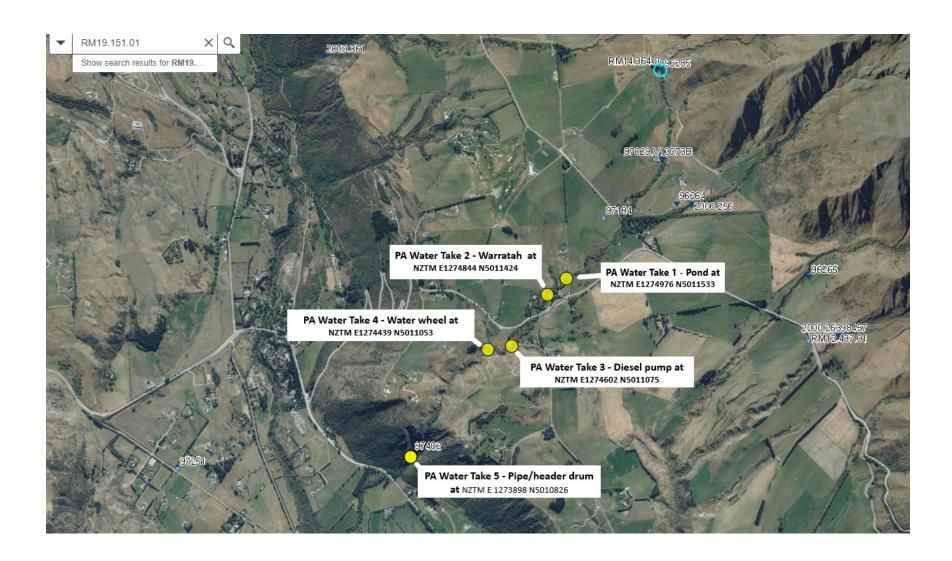
The landowner is in the process of completing construction of a water wheel. Infrastructure has been installed in the waterway however the conveyance of water to the water wheel had not been established at the time of inspection. No water was being abstracted at the time of inspection, however moving forward a permitted activity abstraction will be exercised in this location.

Point of take location 5: NZTM E 1273898 N5010826 (furthest downstream PA)

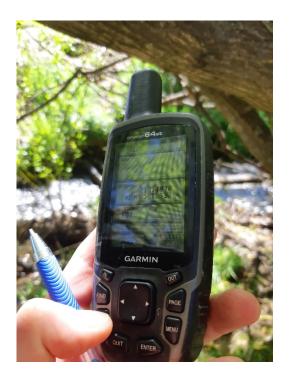
300 CROWN RANGE ROAD ARROW JUNCTION 9371 - Part Section 54 Block VIII Shotover SD

A final permitted activity take was located in close proximity to the Water Permit 97402 point of take. Here, a pipe was located in the Royal Burn conveying water to a small sized header drum. A pipe approximately 50mm in diameter was conveying water from the header drum down gradient toward the state highway.

After querying 97402 consent holder Barry HODGES about this permitted activity take. HODGES confirmed that the water supplies property Section 1 SO 23647 with water. HODGES confirmed that this property had recently changes ownership approximately two months prior. HODGES stated that he suspected that the new owners have never inspected the point of take.



Location of Permitted Activity Water Takes along the Royal Burn









Point of take location 1: NZTM E1274976 N5011533 and ornamental pond water is abstracted to









Point of take location 2: NZTM E1274844 N5011424 and waratah in stream demarcating water take



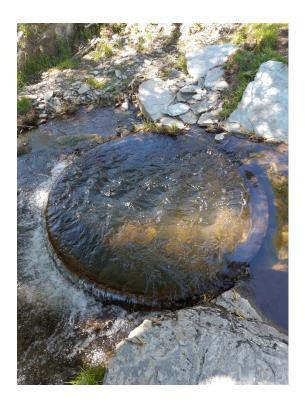






Point of take location 3: NZTM E1274602 N5011075 water abstracted to green tank which supplies dwelling with water









Point of take location 4: NZTM E1274439 N5011053 water wheel and associated infrastructure







Point of take location 5: NZTM E 1273898 N5010826 supplying property Section 1 SO 23647 with water