

Alison Cooper

From: Erin Harvie <erin@bowden.co.nz>
Sent: Wednesday, 15 February 2023 9:49 am
To: Brynlea Stocks; Elise Howe
Subject: RE: CRC213756 CRC214272 Ford Water data questions
Attachments: 32013-2015 Data with adjustments EH.xlsx

Follow Up Flag: Follow up
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Good morning,

The latest s92 response outlined -

The water usage records which are held over the period from 2013-2015 the instantaneous flow rate is recorded as being more than 100L/s; the bore and infrastructure installed is not capable of abstracting these rates. This record has led to the statement from the regional council that irrigation has not been efficient, as the use exceeds the demand for those seasons. However, when removing the exceedances recorded for the overuse then the use of water can be considered efficient i.e., the water used does not exceed the seasonal demand calculated for the given irrigation season (Table one). Removing these false overuse records then –

- *2013-2014 irrigation period the reduced water usage is 245,186m3 between September and 30th April, inclusive.*
- *2014-2015 irrigation period the reduced water usage is 208,260m3 between September and 30th April, inclusive.*

The over use in years 2013/2014 and 2014/2015 was from meter recording the abstraction at 100L/s +, these high peak rates were decreased to at a maximum the consented rate of 50L/s and then the adjusted, any water abstracted outside the nominal irrigation period used for the use vs demand calculation were set to 0L/s. The sum was then utilised for the use vs demand calculation, a copy of the excel spreadsheet with the adjustment is attached (adjustments have been made in the tab L36 0238-M1 m3 vol). Additionally as outlined in the s92 response, irrigation efficiency and irrigation decision making has improved over the last 10+ years.

In relation to CRC214272 and CRC030538.3, consent CRC030538.3 is authorised to irrigate a larger area of the overall property compared to CRC214272. Happy to discuss this one over the phone further as there is a bit of history surrounding it.

Kind regards,

Erin Harvie

Environmental Consultant

Please note: my days of work are Monday to Thursday

DDI 03 375 5015 | Mobile 027 434 7438 | Fax 03 375 5016

Email erin@bowden.co.nz | Web www.bowden.co.nz

Mail PO Box 404, Kaiapoi 7644

Physical 92 Williams Street, Kaiapoi 7630



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From: Brynlea Stocks <Brynlea.Stocks@ecan.govt.nz>
Sent: Tuesday, February 14, 2023 4:46 PM
To: Elise Howe <elise.howe@pdp.co.nz>; Erin Harvie <erin@bowden.co.nz>
Subject: FW: CRC213756 CRC214272 Ford Water data questions

Kia ora Elise,

As discussed on the phone, for application CRC213756 I will need further justification of the proposed seasonal use volume for the 2013/2014 and 2014/2015 years. This including why and when the faulty instantaneous recordings occurred, what adjustments were made to the data and what were the results to the data (including a copy of the updated data).

For application CRC214272 I still require further justification for the need for this consent, in addition to CRC030538.3? CRC214272 and CRC030538.3 are consented to take from the same bores. The data on Compliance Checker (as shown below) shows that the applicant is utilizing the volume allocated by CRC030538.3 and so I do not consider that there is reasonable need for CRC214272.

CRC030538.3

Take Groundwater: L36/0602-M1 + L36/0602-M2 + L36/0915-M1			
Annual Water Use			
Water Year	Allocation	Volume Used	Percent Used
2009 - 2010	570500 m ³	101600 m ³	17.81
2010 - 2011	570500 m ³	72 m ³	0.01
2011 - 2012	570500 m ³	64995 m ³	11.39
2012 - 2013	570500 m ³	5594 m ³	0.98
2013 - 2014	570500 m ³	251123 m ³	44.02
2014 - 2015	570500 m ³	337545 m ³	59.17
2015 - 2016	570500 m ³	1226 m ³	0.21
2016 - 2017	570500 m ³	101172 m ³	17.73
2017 - 2018	570500 m ³	111743 m ³	19.59
2018 - 2019	570500 m ³	13667 m ³	2.40
2019 - 2020	570500 m ³	83882 m ³	14.70
2020 - 2021	570500 m ³	94889 m ³	16.63
2021 - 2022	570500 m ³	223297 m ³	39.14

CRC214272

Take Groundwater: L36/0602-M1 + L36/0602-M2 + L36/0915-M1			
Annual Water Use			
Water Year	Allocation	Volume Used	Percent Used
2009 - 2010	610750 m ³	101600 m ³	16.64
2010 - 2011	610750 m ³	72 m ³	0.01
2011 - 2012	610750 m ³	64995 m ³	10.64
2012 - 2013	610750 m ³	5594 m ³	0.92
2013 - 2014	610750 m ³	251123 m ³	41.12
2014 - 2015	610750 m ³	337545 m ³	55.27
2015 - 2016	610750 m ³	1226 m ³	0.20
2016 - 2017	610750 m ³	101172 m ³	16.57
2017 - 2018	610750 m ³	111743 m ³	18.30
2018 - 2019	610750 m ³	13667 m ³	2.24
2019 - 2020	610750 m ³	83882 m ³	13.73
2020 - 2021	610750 m ³	94889 m ³	15.54
2021 - 2022	610750 m ³	223297 m ³	36.56

@Erin Harvie feel free to give me a call if you want to discuss further.

Thanks,
Brynlea

From: Elise Howe <Elise.Howe@pdp.co.nz>
Sent: Tuesday, 7 February 2023 11:48 am
To: Brynlea Stocks <Brynlea.Stocks@ecan.govt.nz>
Subject: FW: CRC213756 CRC214272 Ford Water data questions

Hello Brynlea,

Please see below answers to your questions in red.

The consultant is happy to answer questions should you wish to discuss with her.

I am preparing the report for decision and plan to have it lodged this week as there are low statutory days.

Happy to discuss,

Many thanks,

Elise Howe - BE(Hons)

PATTLE DELAMORE PARTNERS LTD

Level2, 134 Oxford Terrace, Christchurch 8011

PO Box 389, Christchurch, 8140

NEW ZEALAND

| Mob - +64 021 524 315 | Office - 03 345 7173

Map - [PDP Christchurch Office](#) | Web - www.pdp.co.nz

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From: Erin Harvie <erin@bowden.co.nz>
Sent: Tuesday, 7 February 2023 11:43 am
To: Elise Howe <Elise.Howe@pdp.co.nz>
Subject: RE: CRC213756 CRC214272 Ford Water data questions

Good morning Elise,

Please see notes in red below. Sorry, for missing your call. I am in the office until 2.30pm today and from 8.3-2.3 tomorrow so if either yourself or the principle wants to call me that is fine.

Erin Harvie

Environmental Consultant

Please note: my days of work are Monday to Thursday

DDI 03 375 5015 | Mobile 027 434 7438 | Fax 03 375 5016

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Mail PO Box 404, Kaiapoi 7644

Physical 92 Williams Street, Kaiapoi 7630



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From: Elise Howe <Elise.Howe@pdp.co.nz>
Sent: Wednesday, February 1, 2023 3:15 PM
To: Erin Harvie <erin@bowden.co.nz>
Subject: CRC213756 CRC214272 Ford Water data questions

Hello Erin,

I have received technical advice from ECan and have some questions for you.

CRC213756

The technical reviewer noted the applicant has significantly exceeded their annual volume for the seasons 2013/2014 and 2014/2015. Could you please explain why these exceedances occurred?

In the s92 response I have outlined that the exceedances being referred to are a result of faulty instantaneous recordings on the metering data. For the analysis provided these recordings of 100L/s were decreased to the maximum consented rate. Once adjusted, the annual volumes are not exceeded for the 2013/2014 and 2014/2015 years (which were high demand years). Therefore, I do not agree with your statement that the efficient volume is 200,000m³/yr the applicant has abstracted more than this volume in high demand periods. Additionally, over the last 9 years advancements in technology and implementation of Good Management Practices for irrigation systems and scheduling i.e., small exceedances of water use compared to demand in earlier irrigation seasons in the data set does not necessarily represent inefficient irrigation at the time that irrigation occurred. The applicant has since installed soil moisture monitoring stirps and implementing GMP for irrigation which are audited under the consent to farm.

CRC214272

For CRC214272 (renewal of CRC214271) can you please provide further justification for the need for this consent in addition to resource consent CRC030538.3?

It is noted that CRC030583.3 and CRC214272 share the same bores and do not have separate meters. The applicant has not used the full extent of this annual volume. Can you please explain why there are two consents for the same bores? and why the volume is not fully exercised?

There is a bit of history with the property, so I will try and explain it as best I can here but feel free for yourself or the principle to call me if you need further clarification.

There are two consents that irrigate the area of land under CRC214272. The applicant originally held CRC030538.2 to irrigate. However, this volume was considered insufficient to irrigate the entire area under a pastoral system (the applicant wanted the flexibility to have sufficient water for any farm system to allow for any future changes) and the applicant sought additional water for irrigation (under CRC214271) at a group hearing. The applicant has not utilised the full extent of annual volume across the two consents combined as the farm system changes have not occurred to date. The s92 response provided only water use on 175ha and not the full area able to be irrigated under CRC030583.3.

Kind regards,

Elise Howe - BE(Hons)

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Level2, 134 Oxford Terrace, Christchurch 8011

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