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31/08/2020

ATT: Jana Hayes
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Via email: mailroom@ecan.govt.nz

Dear Jana,

ANNUAL COMPLIANCE REPORT – CENTRAL PLAINS WATER LIMITED

Please find enclosed Central Plains Water Limited's (CPWL's) fourth Annual Compliance Report covering the annual compliance requirements for CPWL's take and use surface water (CRC165680) and discharge of nitrogen to land (CRC165686) resource consents. **Figure 1** shows the three stages of the scheme.

This report covers Stage 1's fifth, Sheffield's third and Stage 2's second irrigation season which operated from 1st September 2018 through to 29th April 2019. Stage 2 operated for its first full irrigation season this year, the previous year the delivery of water did not commence until mid-October due to construction of the scheme.

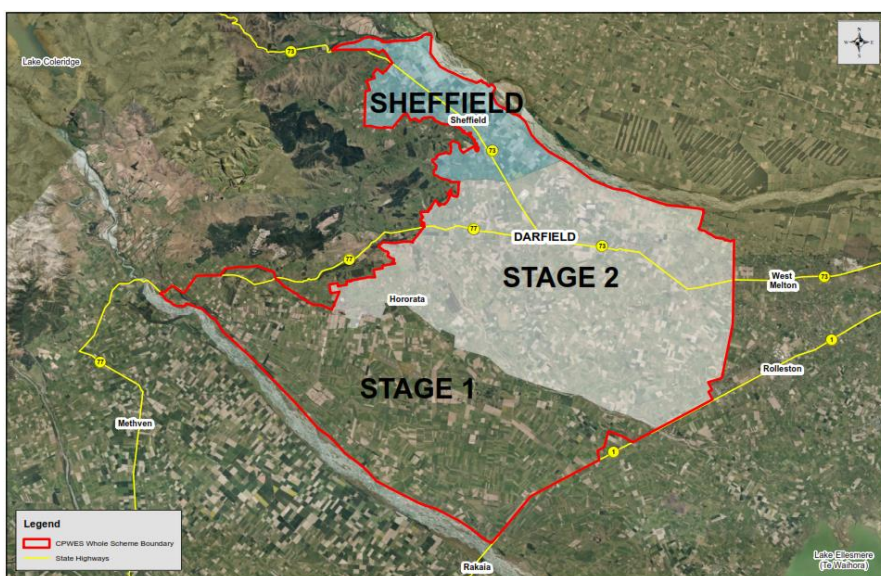


Figure 1. Central Plains Water Limited Scheme Overview

Yours sincerely

Fiona Crombie
Environmental Group Manager
CENTRAL PLAINS WATER LIMITED

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Consent Number:	CRC165680
Location	Rakaia River, CANTERBURY PLAINS
Description:	to take and use surface water
Commencement Date:	6 April 2016
Expiry Date:	25 July 2047

Conditions and Compliance

1.0 CRC165680 to take and use surface water

Water Use Requirements

4. The consent holder shall measure leakage from pipes and structures forming part of the reticulation system that delivers water from the Waimakariri and Rakaia Rivers to the farm supply points for comparison with the target of on average not more than 20% of water taken being lost by leakage from the total reticulation system between 1 September and the following 30 April.

Stage 1

CPWL's use consent and conditions were granted based on an open race (unlined) distribution or piped network which included by-wash discharge points. This system was estimated to lose 20% via race seepage and by-wash.

A significant change to the CPWL infrastructure was the decision to construct a fully piped distribution network and predominantly lined headrace. As this condition has been included in the consent for an infrastructure system specified in the application for consent that is significantly different from the system CPWL has constructed, that mitigates leakage and the actual losses are so low that that they are not measurable this consent condition is now not applicable.

Sheffield

Sheffield has an open water race between Pump Station (PS) 6.1 and the Waimakariri Divide that is approximately 1900m long. Pumping ceased for the season on 26th March 2020. **Table 1** shows a loss of 5.5%.

Table 1. Sheffield Water Race Losses

	24/03/2020 0810-0911hrs
River take (L/s)	1538
Less supply to Wright Co.	0
Theoretical flow to pond (L/s)	1538
Measured flow rate (L/s)	1453
Losses (L/s)	85
Losses (%)	5.5%

6 Water Application Rates

- a) **The maximum application rate shall not exceed 5.18 millimetres per day on a scheme-wide basis, provided that if this application rate is shown to result in a particular property exceeding field capacity then the consent holder shall ensure that the application rate is reduced accordingly.**

The average scheme-wide application rate of CPWL water for the 2019 - 2020 irrigation season was 2.21 mm/day.

No property exceeded 5.18mm/day in this season (**Figure 2**), this includes, where relevant, their combined CPWL and Groundwater take. The maximum application rate for any shareholder was 4.91mm/ha.

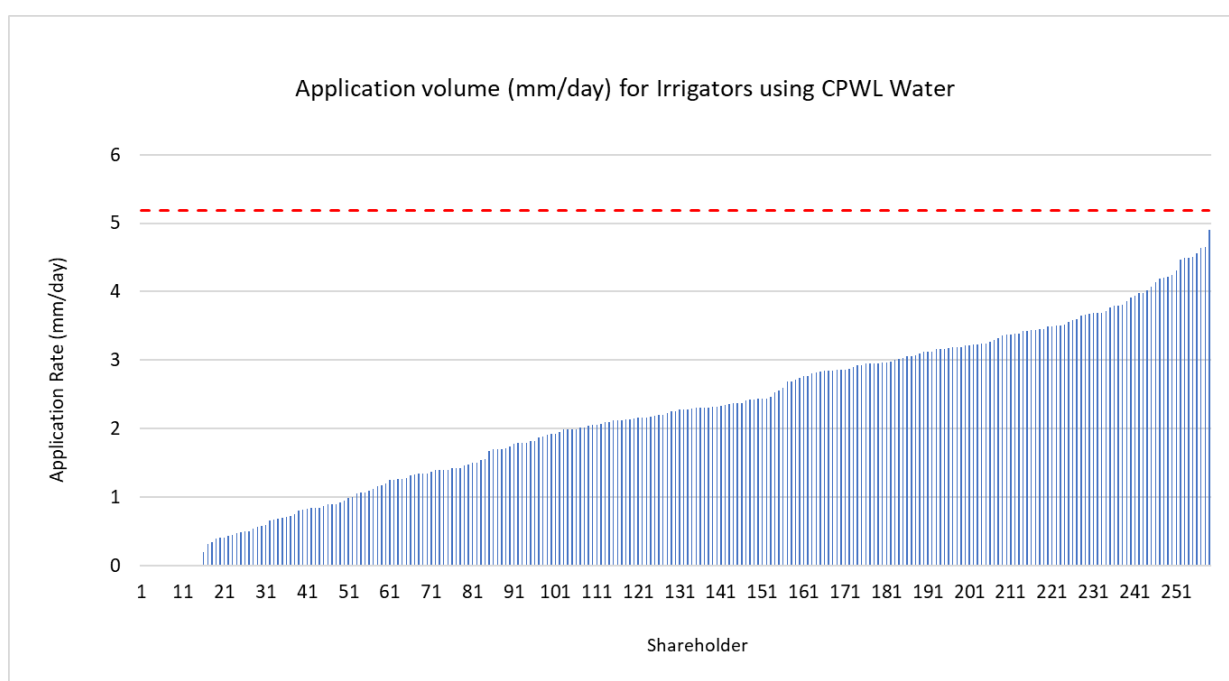


Figure 2. CPWL water application rate (mm/day) for CPWL irrigators during the 2019-2020 irrigation season.

- b) **In the event that water authorised for use under this consent is applied to land concurrently with water abstracted from groundwater, the combined volume of water used on that land shall not exceed:**

- i) **6,250 cubic metres per hectare between the 1st July and the following 30th June; or**
- ii) **The volume authorised on a groundwater irrigation permit if that volume is greater than 6,250 cubic metres per hectare between 1 July and the following 30 June, should the shareholder possess a groundwater permit authorizing irrigation of the same area of land.**

In the 2019-2020 irrigation season no shareholder exceeded 6,250m³/ha or their consented groundwater irrigation application rate. All four shareholders shown in **Figure 3** that exceeded 6,250m³/ha had higher application rates in their groundwater consent.

Only properties where groundwater has been used on land in conjunction with CPWL water is shown, in previous years we have also shown the application rate where only groundwater was applied to

land. Some of the groundwater taken would also be used for purposes other than irrigation, e.g. stock water, dairy shed washdown or domestic use, therefore the results in **Figure 3** are considered conservative. **Figure 4** shows the volume of groundwater used compared to the consented maximum volume that could be taken in a year.

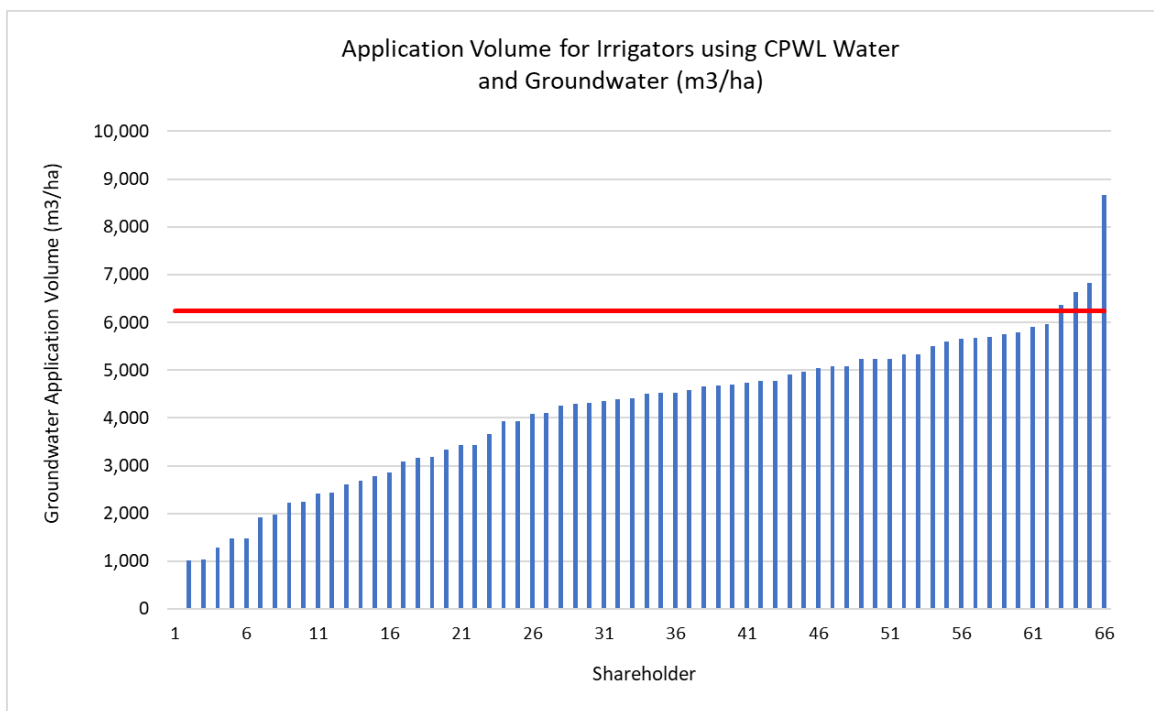


Figure 3. CPWL water and groundwater application volume for groundwater users. The red line indicates the volume of 6,250m³.

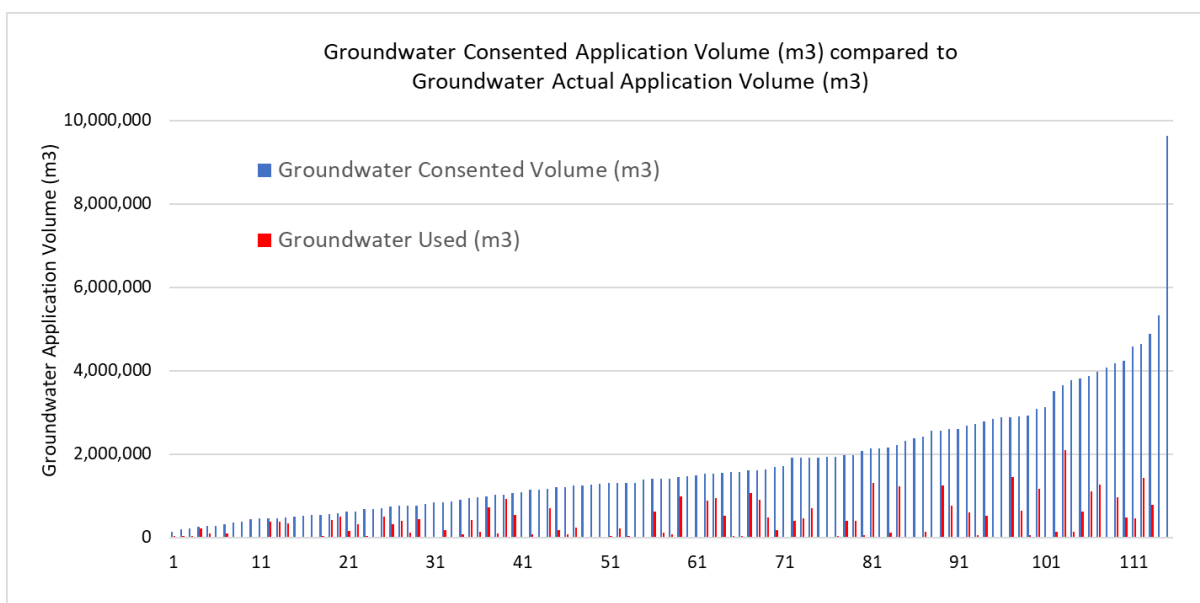


Figure 4. Volume of groundwater used by CPWL shareholders compared to the maximum annual consented volume they could take under their consent.

Consent Number:	CRC165686
Location	Rakaia River, Selwyn
Description:	To discharge of nitrogen to land
Commencement Date:	6 April 2016
Expiry Date:	25 July 2047

Conditions and Compliance

2.0 CRC165686 to discharge of nitrogen to land

- 16 Where stock are wintered on properties outside of those specified in condition 1 but still within the Waihora/Ellesmere Zone area or the Christchurch – West Melton Zone area (as defined in Figure 1 of the Canterbury Water Management Strategy Strategic Framework November 2009), then the consent holder shall obtain, from people using irrigation water under CRC165680, or any subsequent replacements or variations thereof, an undertaking that the stock will only be wintered on a property that has a Farm Environment Plan.**

This is covered in the CPWL Water Use Agreement that each construction shareholder is required to sign up to prior to being delivered water. It is also asked and documented during a Farm Environment Plan audit.

- 18 The consent holder shall:**

a) Prepare an annual report which includes:

- i) Actual land areas using water under CRC165680 or any subsequent replacement or variation thereof;**

The total land area managed under CPWL for 2019-2020 Irrigation Season was approximately 70,000 hectares including Farm Enterprise properties.

Stage 1 covers approximately 30,300 hectares that includes CPWL irrigated land and Farm Enterprise land. Approximately 22,500 hectares of this area was identified as being irrigated with CPWL water. Stage 2 the total land area managed was 32,000 hectares including Farm Enterprise properties (**Figure 5**). The total irrigated area by CPWL water in Stage 2 was approximately 18,200ha.

Land managed under CPWL in the Sheffield scheme is approximately 7,000 hectares including Farm Enterprise properties (**Figure 6**), and approximately 4,200 hectares was irrigated by CPWL water.

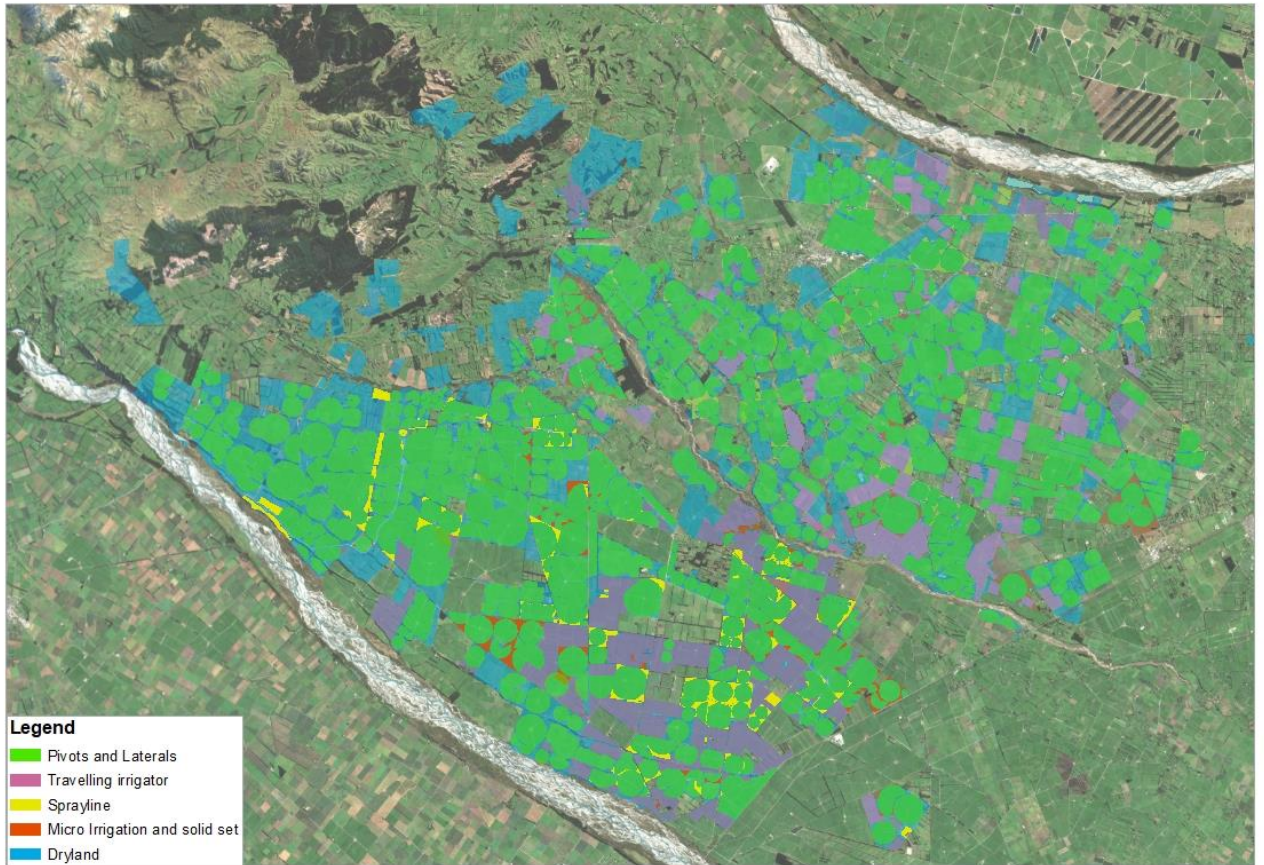


Figure 5. CPWL Stage 1 and 2 shareholder type of irrigation, this includes land that is not irrigated by CPWL however falls under CPWL's discharge consent.

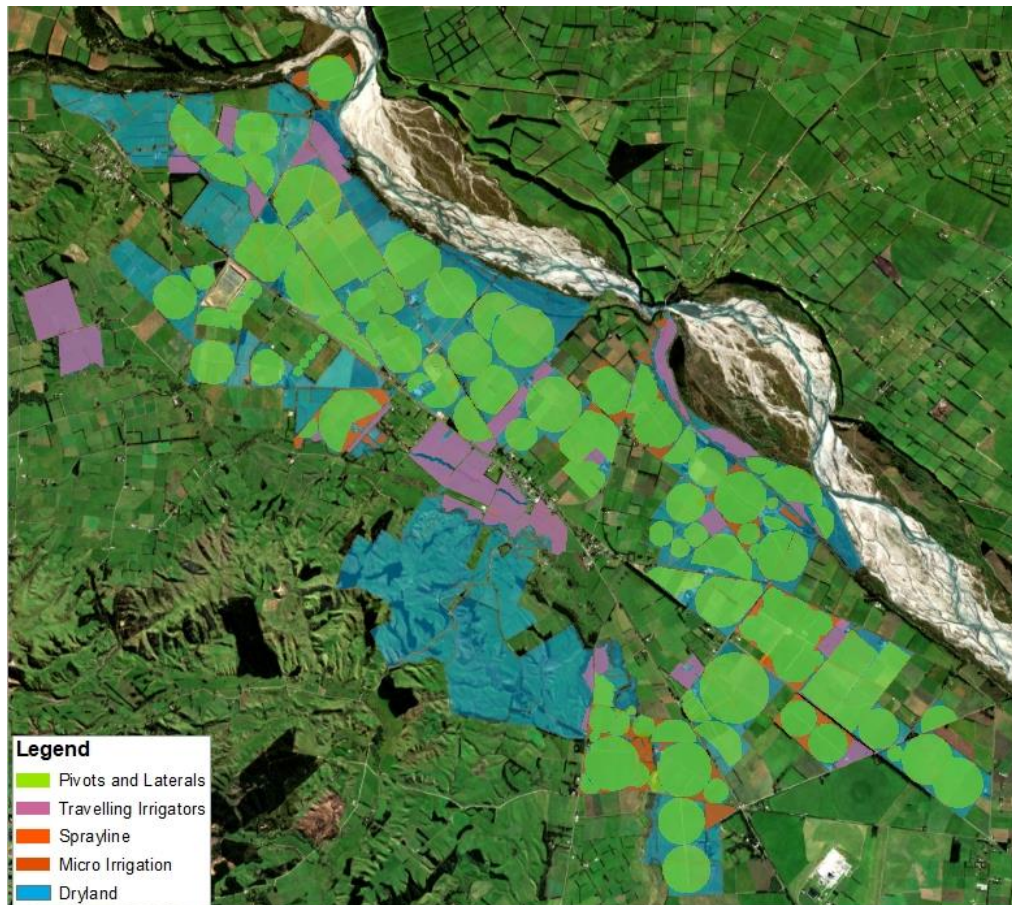


Figure 6. CPWL Sheffield Shareholder type of irrigation, this includes land not irrigated by CPWL however falls under CPWL's discharge consent.

ii) A list of users of water under CRC165680, or any subsequent replacements or variations thereof; **Appendix 1 Schedule CRC165686** lists the Shareholders using CPWL Water during the 2019-2020 irrigation season. This list also includes additional properties that fall under their Farm Enterprise - Category C of Condition 1(a)(ii) - any other properties within the area identified on Plan CRC165686A which forms part of this consent, that are included in and covered by a Farm Environment Plan (FEP) that has been prepared for one of the properties.

iii) Volume of water supplied to each property specified in Condition 1(a)(i);

The volume of water supplied to each shareholder by CPWL in the 2019-2020 irrigation season is available in **Appendix 1 Schedule CRC165686**.

For the 2019-2020 irrigation season 172,998,062m³ of water was delivered to shareholders in the CPWL Scheme. Stage 1 utilised 95,465,919m³, Stage 2 63,412,776m³ and Sheffield 14,119,367m³ of low nutrient, alpine water. This equates to approximately 2% of the water in the Rakaia River being used (**Figure 7**) by CPWL.

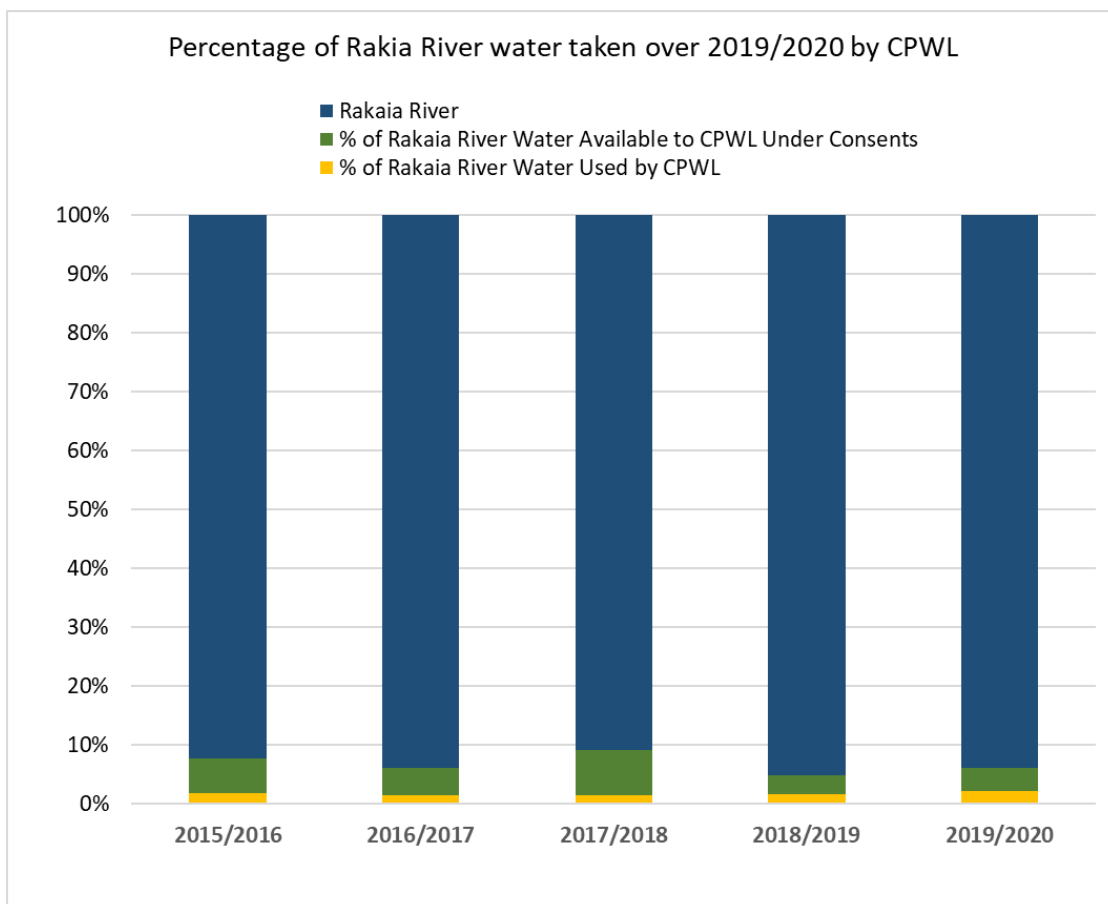


Figure 7. Percentage of the water in the Rakaia River used by CPWL for the 2019/2020 year.

iv) Land uses for each property specified in condition 1(a)(i);

Appendix 1 Schedule CRC165686 details the current land use for each property based on categories defined in OVERSEERFM® nutrient budgets.

Over 50% of farms in CPWL have an interest in other farming types than Dairy and Beef/Dairy Grazing.

Figure 8 shows the current split of land use broken down into eight categories.

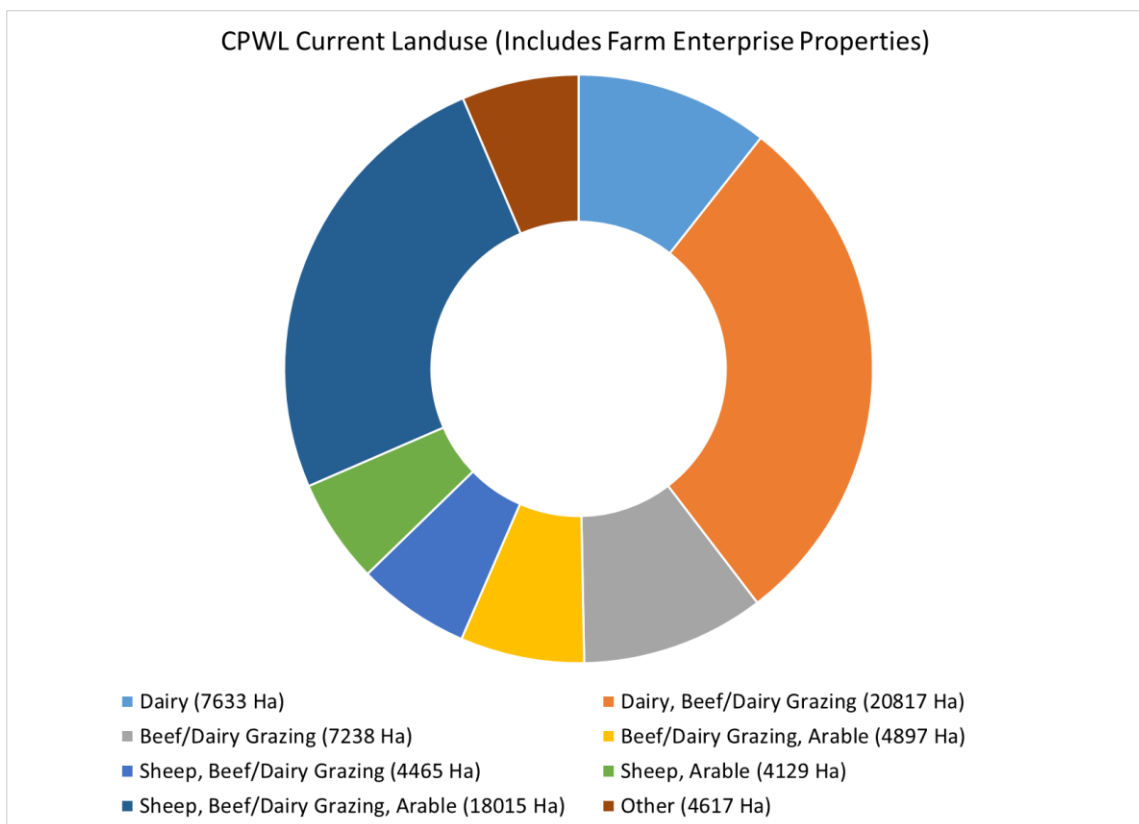
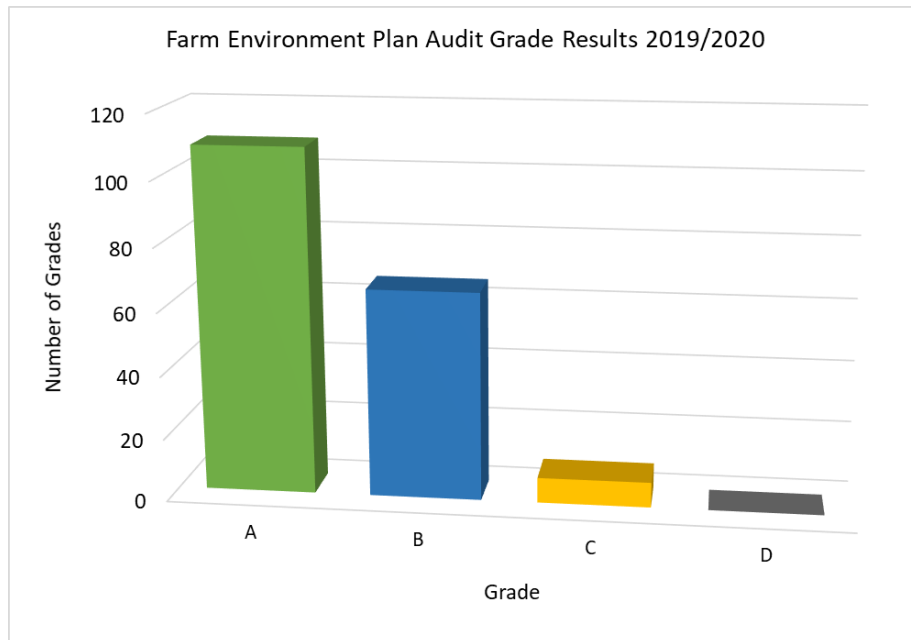


Figure 8. CPWL current land uses for the scheme based on the land use specified in their nutrient budget. This includes Farm Enterprise land, parcels of land that are run with a land parcel that is irrigated by CPWL.

v) A summary of the FEP audit grades assigned in accordance with condition 13 and Appendix CRC165686 within the last 12 months;

183 Farm Environment Plan Audits were conducted in 2019-2020 irrigation season with 96% receiving either an A or B grade (**Figure 9**). Seven audits have been delayed due to Covid and will be audited in October 2020 when they will be irrigating. Ten Farm Environment Plan Audits have been delayed due to changes in farm ownership, manager or system and two properties are new to CPWL these will be audited within one year of change or joining the scheme.



GRADE	A	B	C	D	TOTAL
TOTAL	109	66	8	0	183

Figure 9. 2019-2020 Irrigation Season FEP audit grades.

vi) A summary of the reasons for properties receiving a C or D grade;

Eight properties received C grades during the 2019-2020 farm environment plan audits. Three properties received C grades in relation to collected animal effluent. All three have made progress and had evident plans to install or upgrade existing effluent ponds by their next audit this coming irrigation season.

Appendix 2 outlines the management objectives the eight C grade properties need improvement on and the auditor's reason for the grade.

No D grades were received.

vii) A Summary of actions taken to address C or D grades;

Appendix 2 details the summary of actions that CPWL will work with the shareholders that received a C or D to achieve. Since their audit CPWL has and will continue to assist them in working through the summary of actions highlighted in the Farm Environment Plan Audit and the individual comments received from the auditor.

viii) A list of properties that have been assigned 3 or more C or D grades within the last five years;

No property has received 3 or more C or D grades within the last five years.

ix) The progress achieved for previously identified issues, if applicable;

In the previous year CPWL had three properties that received D grades. CPWL had a farm consultant visit and develop a strategy with the owner / operators of two of the properties the other property had a farm consultant that they used. There have been multiple visits to the properties since from the consultant. This has had measurable results with the key environmental risks being addressed. All three properties received a B grade in the latest audits. There are still actions the auditors want to see undertaken this irrigation season to increase the level of confidence and CPWL will work with them to ensure they are.

CPWL has also carried out the following to assist shareholders in making good decisions as this was identified as an area for improvement:

- Developed a daily reference evapotranspiration system (ETo) where the shareholders can see what the ETo has been for the last 10 days and what the forecasted ETo is for the next three days.
- Installed a weather station in Sheffield.

This year CPWL had the highest percentage of A grades compared to previous years (**Table 2**). This is due to a concerted effort to provide relevant information, training sessions and assistance to shareholders.

Table 2. Percentage of each grade received since CPWL commenced auditing.

GRADE	A	B	C	D	TOTAL
Total 2016/2017	45%	48%	6%	1%	100%
Total 2017/2018	53%	43%	4%	0%	100%
Total 2018/2019	15%	78%	5%	2%	100%
Total 2019/2020	60%	36%	4%	0%	100%

Instead of focussing on the OVERSEERFM© results, CPWL is encouraging shareholders to focus on improving farm practices between now and 2022. With a starting focus on:

- Irrigating only when needed.
- Implementing soil moisture monitors, flow meters and using weather forecasting.
- Making sure each irrigation systems are working properly, through providing resources to ensure the owners/managers can undertake testing of their irrigation infrastructure and understand what the results mean.
- Ensuring pre-season inspections are undertaken. Irrigation infrastructure is regularly inspected, maintained and calibrated.
- Ensure effluent is stored, managed and applied properly and that there are plans in place in an emergency.

x) The sum of the annual amount of nitrogen that is lost to water from properties listed in Schedule CRC165686 Groups A and B; and

For 2019-2020 irrigation season the amount of nitrogen lost to water from properties in groups A and B was 4,100 tonne. However, I am still awaiting nutrient budgets for farms in group B (that hold their own consent) as they are only due to complete their nutrient budgets end of August/start of September due to a different reporting year.

xi) The annual amount of nitrogen loss to water for each property listed in Schedule CRC165686 Groups B and C, as calculated in Accordance with Appendix CRC165686;

For 2019-2020 irrigation season the amount of nitrogen lost to water from properties in group B and C was 638 tonne. However, I am still awaiting nutrient budgets for farms in group B as they are only due to complete their nutrient budgets end of August/start of September due to a different reporting year.

APPENDIX 1
Schedule CRC165686

SCHEDULE CRC165686									
	Shareholder ID	Property Area (ha)	Group (A, B, C)	FEP Audit Grade 2019/2020	Land Use Baseline	Land Use Current	Type of Irrigator	2017 Nitrogen Discharge Allowance (NDA) (kg)	CPWL Water Used 2019-2020 Irrigation Season (m3)
1	R002070219	445	A		Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing	Mixed	27776	400046
2	R000190421	362	A		Beef/Dairy Grazing, Arable	Beef/Dairy Grazing	Existing Irrigator	17153	994476
3	R601154421	401	A		Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing	New Irrigator	25087	638103
4	R601531691	188	A	A	Beef/Dairy Grazing	Beef/Dairy Grazing	Existing Irrigator	9898	348671
5	R000075436	355	A		Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	27282	704038
6	R600354248	363	A		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Mixed	24658	1150144
7	R601514346	533	A		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	52722	1461413
8	R002337584	2709	A		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	310464	8981277
9	R601249286	214	A	LWP	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	20288	96137
10	R002051192	214	A		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	7699	779998
11	R002061376	325	A	A	Dairy	Dairy	Existing Irrigator	39330	2344107
12	R002061376	384	C		Dairy	Dairy	Existing Irrigator		0
13	R002071568	202	A	Covid Extension	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	23630	1231993
14	R002340551	252	A	B	Beef/Dairy Grazing	Dairy	Mixed	142869	1220283
15	R601563665	256	A	B	Beef/Dairy Grazing	Beef/Dairy Grazing	New Irrigator		961795
16	R002340593	419	A		Dairy, Beef/Dairy Grazing	Dairy	Existing Irrigator		1829556
17	R002340585	280	A	B	Dairy	Dairy	Existing Irrigator		1331829
18	R600886771	389	A	A	Sheep, Beef/Dairy Grazing	Beef/dairy grazing	Existing Irrigator		1555881
19	R600886771	223	C	A	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator		0
20	R601154439	217	A	A	Dairy, Beef/Dairy Grazing	Dairy	Existing Irrigator	17907	1162047
21	R602067408	93	C	A	Sheep, Arable	Sheep, Beef/dairy grazing	Existing Irrigator		0
22	R601412047	512	A	A	Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing, Orchard	New Irrigator	9361	798119
23	R601412047	305	C	A	Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing	Existing Irrigator		0
24	R002066874	535	A		Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing, Arable	Mixed	41579	486191
25	R000194731	394	A		Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing	New Irrigator	23632	1744952
26	R601617684	284	A	A	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	83413	852439
27	R60167692	196	A	A	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator		1036822
28	332079841	215	A		Beef/Dairy Grazing	Beef/Dairy Grazing	Existing Irrigator		1682125
29	R601410656	280	A	A	Arable	Dairy, Beef/Dairy Grazing	Existing Irrigator		1477860
30	R002381672	447	A		Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	47832	432116
31	R600293168	522	A	B	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Mixed	37701	1996327
32	R601618338	121	A	B	Beef/Dairy Grazing	Beef/Dairy Grazing	New Irrigator		658969
33	R002069571	188	A		Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	13488	925794
34	R602515478 & R601562693	1129	A	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	33264	1036830
35	R601820706	41.2	A	B	Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing	New Irrigator	2355	173811
36	330247827	326	A		Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing, Arable	New Irrigator	35312	337596
37	330247827	321	A		Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing, Arable	New Irrigator		207768
38	330247827	44	A		Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing, Arable	Dryland		0

	Shareholder ID	Property Area (ha)	Group (A, B, C)	FEP Audit Grade 2019/2020	Land Use Baseline	Land Use Current	Type of Irrigator	2017 Nitrogen Discharge Allowance (NDA) (kg)	CPWL Water Used 2019-2020 Irrigation Season (m3)
39	R601798549	185	A	B	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	19575	933416
40	R002077434	327	A		Sheep, Beef/Dairy Grazing, Arable, Deer, Other	Sheep, Beef/Dairy Grazing, Arable, Deer, Other	Mixed	18599	516751
	R601235498	340	A	B	Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing, Arable	New Irrigator	33525	734679
42	R601231409	239	A	B	Beef/Dairy Grazing, Deer, Arable	Beef/Dairy Grazing, Arable	New Irrigator	12734	626983
43	R601293021	3.5	A		Other	Other	Lifestyle Block	53	13057
44	R002071801	130	A	A	Beef/Dairy Grazing, Arable	Beef/Dairy Grazing, Arable	Existing Irrigator	6547	36979
45	R002071801	10	C	A	Beef/Dairy Grazing	Beef/Dairy Grazing	Existing Irrigator	150	0
46	R602062384	276	A	LWP	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	17386	285539
47	R600958623	459	A	B	Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing, Arable	New Irrigator	48183	1980668
48	R002070197	346	A	B	Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing	New Irrigator	9202	398368
49	R002065487	205	A	A	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	25315	1198570
50	R601414287	160	A		Sheep	Dairy, Beef/Dairy Grazing	New Irrigator		
51	R601607751	120	A	LWP	Sheep, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Mixed	6888	374908
52	R602522954	351	A	Change in ownership	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	34934	1629672
53	R000193524 & R601977851	283	A		Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	14294	1167469
54	R000192382 & R601704315 & R601429187	329	A	B	Sheep, Beef/dairy Grazing, Arable, Trees and Shrub	Beef/dairy Grazing, Arable	Mixed	13484	632148
55	333296357	555	A		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Mixed	36044	2017184
56	R601695545	181	A	A	Beef/Dairy Grazing	Beef/Dairy Grazing	Mixed		275442
57	R002067374	86	A		Beef/Dairy Grazing	Beef/Dairy Grazing	New Irrigator	3375	167594
58	R601772868	488	A	A	Dairy, Beef/Dairy Grazing, Sheep, Other	Dairy, Beef/Dairy Grazing, Other	Mixed	41426	646604
59	R601330385	210	A		Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	New Irrigator	14875	1155930
60	R002066912	196	A	A	Outdoor Sows, Sheep, Beef/Dairy Grazing	Sows, Beef/Dairy Grazing	New Irrigator	14765	320560
61	R600851471	256	A	Covid Extension	Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	New Irrigator	93154	880231
62	R600851471	204	A	Covid Extension	Beef/Dairy Grazing	Beef/Dairy Grazing	New Irrigator		1262787
63	R601546221	417	A	Change in farm manager	Dairy, Sheep, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	New Irrigator		1883707
64	R600961861	82	A	Covid Extension	Sheep, Beef/Dairy Grazing, Deer, Horses	Beef/Dairy Grazing	New Irrigator		417589
65	R600961861	363	A	A	Beef/Dairy Grazing, Sheep	Beef/Dairy Grazing, Arable	New Irrigator		1108506
66	R601604001	368	A		Sheep, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing, Sheep, Deer	New Irrigator	11457	536416
67	R601871891	407	A		Dairy, Beef/Dairy Grazing, Trees	Dairy, Beef/Dairy Grazing	Mixed	51987	2114579
68	R601456541	122	A	A	Sheep	Sheep	New Irrigator	5036	644729
69	330446099	220	A	C	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator	8629	174508
70	R002065266	246	A		Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	18814	1185115

	Shareholder ID	Property Area (ha)	Group (A, B, C)	FEP Audit Grade 2019/2020	Land Use Baseline	Land Use Current	Type of Irrigator	2017 Nitrogen Discharge Allowance (NDA) (kg)	CPWL Water Used 2019-2020 Irrigation Season (m3)
71	R002067447	536.7	A	B	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	23631	2022794
72	R601929988	244.8	A	A	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	16140	1242215
73	R601408619	57.7	A		Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing	Mixed	4107	281370
74	R601327309	331	A	A	Dairy	Dairy	Existing Irrigator	22120	906732
75	R601327309	230	A		Beef/Dairy Grazing	Beef/Dairy Grazing	New Irrigator	51196	1074619
76	R601327309	144.3	C		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator		0
77	R601327309	307.4	C		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator		0
78	R002070626	418.9	A	Change in farm manager	Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing	New Irrigator	37621	1523597
79	R601651939	186.3	A		Dairy, Beef/Dairy Grazing	Dairy	Existing Irrigator	224292	707151
80	R601521351	202.9	A		Dairy, Beef/Dairy Grazing	Dairy	Existing Irrigator		915439
81	R601612747	308.5	A		Sheep, Beef/Dairy Grazing	Dairy	Mixed		1255096
82	R601651947	241.9	A		Dairy, Beef/Dairy Grazing, Sheep	Dairy	Mixed		1109937
83	R601724235	254.6	A		Dairy, Beef/Dairy Grazing	Dairy	Existing Irrigator		1122300
84	R601700301	161	A		Dairy, Beef/Dairy Grazing	Dairy	Existing Irrigator		535172
85	R601700301	393	C		Dairy, Dairy Replacement	Dairy	Existing Irrigator		0
86	R601700301	341.4	C		Dairy, Dairy Replacement	Dairy	Existing Irrigator		0
87	R600582216	223.3	A	B	Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing	New Irrigator	5723	137803
88	R002064588	180.8	A		Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	46115	1746586
89	333059762	297.2	A		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator		877911
90	R002071894 & R002337614	312.9	A		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	33721	1620559
91	R002071533	194.8	A	Covid Extension	Dairy, Beef/Dairy Grazing	Dairy	Existing Irrigator	14334	898618
92	R002333457	619.5	A		Dairy, Beef/Dairy Grazing, Deer	Dairy, Beef/Dairy Grazing	Mixed	38356	2529530
93	R600933311	398.8	A & C		Dairy, Sheep, Trees and Shrub	Dairy, Beef/Dairy Grazing	Mixed	24168	855754
94	R601396718	416.6	A & C		Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	42365	1255664
95	R002071258	94	A		Sheep, Beef/Dairy Grazing, Arable	Sheep, Arable	New Irrigator		276233
96	R601602440	325.5	A		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	16149	348908
97	R600948997 & R00187634	204.8	A		Dairy, Sheep, Beef/Dairy Grazing	Dairy	Mixed	10003	768240
98	R601005280	120	A	B	Beef/Dairy Grazing, Arable	Dairy	New Irrigator	12165	531546
99	R002070413	368.5	A & B		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Mixed	19860	963499
100	R600724088	0	B		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	N/A category B	307770
101	R600724088	0	B		Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	N/A category B	1748631
102	R002069261	275.1	B		Beef/Dairy Grazing	Dairy	Existing Irrigator	N/A category B	132762
103	310034746	371.5	B		Dairy	Dairy	Existing Irrigator	N/A category B	1614507
104	R601639840	366	B		Beef/Dairy Grazing	Beef/Dairy Grazing	Existing Irrigator	N/A category B	965191
105	310034592	314	B		Dairy	Dairy	Existing Irrigator	N/A category B	1737986
106	R002066157	164	A	A	Beef/dairy grazing	Beef/dairy grazing	New Irrigator	7169	710264

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107	R002067021	240.9	A	A	Beef/Dairy Grazing, Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	27963	594353
108	R002067021	117.6	A	A	Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator		
109	R002334143	50.1	A	A	Sheep, Arable	Arable	New Irrigator		98043.59
110	R602269809	245	B	N/A – Group B	Beef/Dairy Grazing	Beef/Dairy Grazing	Existing Irrigator	6105	0
111	R601768356	231	A & C	A	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	18821	963534
112	R601887410	213	A	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	11158	369964
113	R601792851	221	A	B	Dairy, Beef/Dairy Grazing	Dairy, Arable	Existing Irrigator	45509	299560
114	R601846934	271	A	B	Sheep, Arable	Dairy, Beef/Dairy Grazing	Existing Irrigator		277791
115	R601447185	452	A	A	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	27416	967752
116	R601809818	254	A	B	Beef/Dairy Grazing, Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator	16653	167876
117	R000192796	343	A	C	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	16850	1382717
118	R002070600	262	A & C	B	Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	9502	617134
119	R601844036	180	A & C	B	Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing	New Irrigator	11690	336704
120	R000191113	201	C	B	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Dryland	22475	0
121	R000191113	272	C	B	Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing, Arable	Dryland		0
122	R000191113	192	A & C	B	Sheep, Beef/Dairy Grazing, Arable, Other	Sheep, Beef/Dairy Grazing, Arable	New Irrigator		565260
123	R602266125	320	A & C	A	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	26274	546677
124	R601797135 & R002070162	724	A & C	B	Beef/dairy grazing, Sheep, Arable, Trees and Scrubs	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	49725	1693703
125	R002070162	167	A	New to scheme	Sheep	Sheep, Beef/Dairy Grazing, Arable	New Irrigator		193623
126	R002070189	98	A	B	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator		263930
127	R001836188	321	A	B	Sheep, Arable	Sheep, Arable	New Irrigator	8986	1138398
128	R002066441	83	A	A	Beef/dairy grazing	Beef/dairy grazing	New Irrigator	2496	219382
129	330749091	543	A & C	A	Sheep, Beef/dairy grazing, Arable, Other	Sheep, Beef/Dairy Grazing, Arable, Horses	New Irrigator	29494	403322
130	R002070511	30	A	B	Sheep	Sheep, Arable	New Irrigator	1608	120134
131	R601372690	140	A	A	Sheep, Arable	Sheep, Arable	Existing Irrigator	4155	77411
132	R601700018	690	A & C	B	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	26510	579427
133	R601771241	200	A	A	Sheep, Beef/Dairy Grazing, Deer, Arable	Beef/Dairy Grazing, Sheep, Arable, Other	Mixed	16613	255872
134	R601771241	22	C	A	Beef/Dairy Grazing, Sheep	Beef/Dairy Grazing	Dryland		0
135	R601771241	38	C	A	Beef/Dairy Grazing, Sheep, Arable	Beef/Dairy Grazing, Sheep, Arable, Other	Dryland		0
136	R601236052	521	A	A	Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing	New Irrigator	19730	464081
137	R602199631	0	C	A	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	39981	0
138	R602199631	228	A	A	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator		831943
139	R602199631	105	A	A	Beef/Dairy Grazing	Beef/Dairy Grazing	Existing Irrigator		
140	R602199631	93	C	A	Sheep	Beef/Dairy Grazing	Existing Irrigator		0
141	R002065436	197	A	A	Sheep, Beef/Dairy Grazing	Beef/Dairy Grazing	New Irrigator	18975	883658
142	R602156851	346	A	A	Sheep, Beef/Dairy Grazing, Deer, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	19288	627061
143	R601674823	28	A	B	Sheep, Arable	Arable	New Irrigator	1069	50807
144	R600977881	81	A	B	Sheep	Sheep	New Irrigator	1505	35050
145	R601810883 & R601810875	134	A	A	Sheep	Beef/Dairy Grazing	New Irrigator	8815	121384

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146	R600756371	212.6	A & C	A	Beef/Dairy Grazing, Sheep, Deer, Trees	Sheep, Beef/Dairy Grazing, Deer	New Irrigator	19159	456622
147	R600756371	38.7	C	A	Deer	Deer	Dryland	980	0
148	R601705010	114.8	A	A	Beef/Dairy Grazing, Sheep	Sheep, Beef/Dairy Grazing	New Irrigator	6988	130902
149	R601705010	375.9	C	A	Beef/Dairy Grazing, Sheep	Sheep, Beef/Dairy Grazing	Dryland	4499	0
150	R000193823	780	A & C	A	Sheep, Arable	Sheep, Arable	New Irrigator	33928	900310
151	R601758571	278	A	A	Sheep, Arable	Dairy	Existing Irrigator	35346	471964
152	R002066866	230	C	A & LWP	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	21227	0
153	R002066866	77.2	C	A & LWP	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	6844	0
154	R000187680	121	A	B	Beef/Dairy Grazing, Sheep, Arable	Arable, Other	New Irrigator	1791	276118
155	R602064638	231	A & C	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Arable	Existing Irrigator	9411	110513
156	R601731428	123	A	A	Dairy	Beef/Dairy Grazing, Arable	Mixed	7668	403466
157	R601700875	172.3	A	A	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	8680	2376577
158	R601700875	247.6	A	C	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	12642	0
159	R601700875	134	A	A	Sheep, Beef/Dairy Grazing, Arable	Beef/Dairy Grazing	New Irrigator	7783	157065
160	R601700875	193.3	A	A	Sheep, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	20315	854418
161	332069837	383	A	A	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Mixed	42919	891615
162	R002385791	55	A	A	Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	New Irrigator	5235	212470
163	R002071886	23.7	A	A	Arable	Dairy	New Irrigator	2774	141410
164	R601888271	125.1	A	A	Arable	Arable	Existing Irrigator	9353	75739
165	R601986108	320.7	A & C	A	Sheep, Beef/Dairy Grazing, Arable	Beef/Dairy Grazing	New Irrigator	8834	112915
166	R601810891	76	A	Change in ownership	Beef/Dairy Grazing, Arable	Beef/Dairy Grazing	New Irrigator	6162	141548
167	R601077116 & R002065223	308.5	A	B	Sheep, Beef/Dairy Grazing, Arable	Beef/Dairy Grazing	New Irrigator	28850	979236
168	R002067200	81.6	A	Assurance	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	15	44817
169	R601677521	115	A	C	Sheep	Sheep, Arable	New Irrigator	2182	68377
170	R002067501	515.6	A & C	B	Beef/Dairy Grazing, Sheep	Sheep, Beef/Dairy Grazing	Existing Irrigator	14773	1116774
171	R000195967	712.1	A & C	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	33280	606422
172	R002069598	273.8	A & C	A	Dairy, Sheep, Beef/Dairy Grazing, Other	Dairy, Beef/Dairy Grazing	Mixed	21700	518642
173	R000190157	416.8	A & C	A	Dairy, Beef/Dairy Grazing, Sheep, Arable	Dairy, Beef/Dairy Grazing, Sheep, Arable	Mixed	32523	1160524
174	R601705052	198.2	A	A	Dairy, Sheep, Other	Dairy, Beef/Dairy Grazing	Existing Irrigator	8700	544505
175	R601705052	207.5	C	A	Beef/Dairy Grazing	Beef/Dairy Grazing	Mixed	13085	0
176	R601635968	143	A	LWP	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	18726	760888
177	R601635968	114	A	LWP	Dairy, Beef/Dairy Grazing	Beef/Dairy Grazing	Existing Irrigator		
178	R601635968	38.5	A	LWP	Sheep, Beef/Dairy Grazing, Arable	Beef/Dairy Grazing	New Irrigator		
179	R601811111	84.1	A	A	Beef/Dairy Grazing, Sheep	Arable	New Irrigator	5519	230354
180	R000194879	560	A & C	C	Beef/Dairy Grazing, Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator	18879	546889
181	R602179524	38.5	A	A	Sheep, Arable	Arable	New Irrigator	862	57085
182	R002070995	258.2	A	A	Beef/Dairy Grazing, Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator	18810	191091

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183	R601677113	308.7	A & C	B	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Mixed	31282	480440
184	R601677113	53.2	A	B	Sheep	Beef/Dairy Grazing	New Irrigator		
185	R601677113	16.1	A	B	Beef/Dairy Grazing, Arable	Beef/Dairy Grazing	Existing Irrigator		
186	R601677113	22	C	B	Deer	Beef/Dairy Grazing	Existing Irrigator		
187	R601342260	402	A	A	Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	19399	2087711
188	R002069091	475	A & C	A	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	Existing Irrigator	67752	1980594
189	R601649233	127.9	A	A	Beef/Dairy Grazing	Beef/Dairy Grazing, Arable	Existing Irrigator		
190	R002069091	148	A	A	Sheep, Beef/Dairy Grazing, Arable	Beef/Dairy Grazing	Mixed		
191	333296012	182.7	A	C	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator	33887	384826
192	333296012	61	A	C	Beef/Dairy Grazing, Arable	Dairy	New Irrigator		
193	R601677369	49.6	A	B	Beef/Dairy Grazing, Sheep, Arable	Sheep, Arable	Existing Irrigator	4561	0.15
194	R002077451	205.3	A	A	Beef/Dairy Grazing, Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator	7016	160350
195	R002077451	80	C	A	Beef/Dairy Grazing, Sheep	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator		
196	R601986108 & R002065231	64.9	A	A	Beef/Dairy Grazing, Arable	Beef/Dairy Grazing, Arable	Existing Irrigator	1879	1621062
197	R601436329	128	A & C	A	Sheep, Arable	Sheep	New Irrigator	8805	74525
198	R002065550	49.8	A	B	Sheep	Sheep	New Irrigator	1033	30054
199	R002069865	160.4	C	B	Sheep, Arable	Sheep, Arable	Existing Irrigator	8757	0
200	R002069865	64	A	B	Arable	Arable	Existing Irrigator		
201	R601880636	300.8	A	A	Beef/Dairy Grazing, Arable	Beef/Dairy Grazing, Arable	Mixed	25397	1005719
202	R002065606	275.8	A	B	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	26224	327064
203	R002069369	126.5	A	A	Beef/Dairy Grazing, Other	Dairy	Existing Irrigator	46130	1689398
205	R002069369	197.3	A	A	Dairy, Beef/Dairy Grazing, Arable	Dairy, Beef/Dairy Grazing	Existing Irrigator		
206	R002069369	109.9	A	A	Sheep	Dairy, Beef/Dairy Grazing	New Irrigator		
204	R002069369	43.3	C	A	Beef/Dairy Grazing	Beef/Dairy Grazing	Existing Irrigator		
207	R601772591	333.1	A	B	Sheep, Arable	Sheep, Arable	Mixed	25686	322577
208	R601677415	183.2	A & C	B	Sheep	Sheep	New Irrigator	4536	131073
209	R601929899	77.7	A	A	Sheep, Deer	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	5036	247451
210	R601693895	271.6	A	A	Dairy	Dairy	Existing Irrigator	22669	493711
211	R601724677	154	A & C	A	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing, Sheep	Existing Irrigator	8658	666340
212	R601527405	156.5	A	Change in ownership	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator	18890	366394
213	R601527405	102	C		Sheep, Arable	Sheep, Arable	Existing Irrigator		
214	R601420082	171	A	A	Arable	Sheep, Arable	Existing Irrigator	12893	491861
215	R002065622 & R601802333	444.8	A & C	A	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	37902	734366
216	334588351	220	A	B	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	11965	730768
217	R601715848	204.4	A	A	Sheep, Arable	Sheep, Arable	New Irrigator	16743	528154

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218	R002070987	464	A & C	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	10654	664902
219	R002070987	62.3	A	A	Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing, Arable	Mixed		143562
220	R601812932	219	A & C	A	Sheep, Beef/dairy grazing, Deer, Arable, Other	Sheep, Beef/Dairy Grazing, Arable	Mixed	12203	162850
221	R002065517	139.1	A	A	Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	6441	386254
222	R601310651	162	A & C	B	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing, Arable	Mixed	8019	324215
223	R601395274	569.6	C	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator	47703	0
224	R601395274	192.9	A & C	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed		190307
225	R001341723	495	A	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	30101	364699
226	330823437	266.5	A	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	14943	437588
227	R601414295	249	A	B	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	10426	554255
228	R601225069 & 331610852	184.8	A & C	B	Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing	New Irrigator	6224	232021
229	R601772876	509	A & C	B	Dairy, Beef/Dairy Grazing, Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator	46132	434008
230	R601812924 & R002069890	359.6	A & C	A	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	21473	566211
231	R601818248	81.1	A	C	Beef/Dairy Grazing, Arable	Beef/Dairy Grazing, Arable	Existing Irrigator	7358	1841
232	R600933345	265.8	A	LWP	Dairy, Beef/Dairy Grazing, Sheep, Deer	Dairy, Beef/Dairy Grazing	Mixed	68557	1202720
233	R600933345	339.8	A	LWP	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator		1390602
234	R002385791	135	A	LWP	Sheep, Beef/Dairy Grazing, Arable	Dairy, Beef/Dairy Grazing	New Irrigator		515111
235	R600933345	300.3	A	LWP	Dairy	Dairy, Beef/Dairy Grazing	Existing Irrigator		1553811
236	R002071851	796.2	A	B	Sheep, Arable	Sheep, Arable	New Irrigator		46609
237	R602425096	153.9	A & C	B	Beef/Dairy Grazing, Sheep	Sheep, Beef/Dairy Grazing	New Irrigator	4889	123812
238	R601846942 & R601203481	143	A	A	Beef/Dairy Grazing, Arable	Beef/Dairy Grazing, Arable	New Irrigator	10076	318595
239	R601654156	248.5	A & C	A	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	15712	402695
240	R601706849	267.3	A & C	A	Sheep, Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	16675	1010255
241	R601715830	119	A	B	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	5658	127590
242	R600618679	43	A	Change in Farm Manager	Beef/Dairy Grazing	Beef/Dairy Grazing	New Irrigator	618	24
243	R601847876	219.7	A	B	Sheep, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	New Irrigator	18692	1026292
244	R601677679	199.6	A	A	Sheep/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	12780	292918
245	R601689821	388	A & C	B	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	13850	1062895
246	R601308568	400	A & C	B	Beef/Dairy Grazing, Sheep, Arable, Other	Sheep, Beef/Dairy Grazing, Arable	Mixed	26665	232298
247	R601756153	18.4	A	A	Horticulture, Other Grazing	Horticulture, Other Grazing	New Irrigator	276	15219
248	R002069172	325.2	A	A	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	28,864	762981
249	R601771233	308	A	A	Sheep, Beef/dairy grazing	Sheep, Beef/Dairy grazing, Arable	New Irrigator	17954	256883
250	R601724928	114.6	A	A	Sheep, Beef/dairy grazing, Arable	Dairy, Beef/Dairy Grazing, Sheep	Mixed	8016	443139

	Shareholder ID	Property Area (ha)	Group (A, B, C)	FEP Audit Grade 2019/2020	Land Use Baseline	Land Use Current	Type of Irrigator	2017 Nitrogen Discharge Allowance (NDA) (kg)	CPWL Water Used 2019-2020 Irrigation Season (m3)
251	R601292386	197	A	A	Sheep, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	13278	611632
252	R002067242	304.5	A	A	Sheep, Beef/dairy grazing	Sheep, Beef/Dairy Grazing, Arable	New Irrigator	15769	560912
253	R002069989	171	A	A	Sheep, Beef/dairy grazing, Arable	Sheep, Beef/dairy grazing, Arable	New Irrigator	7429	253722
254	R601730375	530	A	A	Beef/dairy grazing	Sheep, Beef/Dairy grazing, Arable	New Irrigator	28863	156672
255	R601929970	112.2	A & C	A	Beef/Dairy Grazing	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator		152584
256	331020681	58.8	A	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	New Irrigator		186823
257	R601730375	102.6	C	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing	Dryland		0
258	R601730391	20	A	A	Sheep	Beef/Dairy Grazing	New Irrigator	1173	49155
259	R002066947	273.4	A	A	Sheep, Beef/dairy grazing, Arable	Sheep, Beef/dairy grazing, Arable	New Irrigator	16698	635552
260	R600507664	52.6	A	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator		
261	R601665832	140.3	A	A	Sheep, Beef/Dairy Grazing, Arable, Other	Beef/dairy grazing, Arable	New Irrigator	5892	419289
262	R600236385	219.1	A	B	Dairy, Beef/dairy grazing	Dairy, Beef/dairy grazing	Existing Irrigator	54153	843136
263	R600236385	317.3	A	C	Dairy, Beef/dairy grazing	Dairy, Beef/dairy grazing	New Irrigator		1142239
264	R600236385	78.6	C	B	Dairy	Dairy	Existing Irrigator		0
265	R601100282	108.5	A	LWP	Dairy, Beef/dairy grazing	Dairy, Beef/dairy grazing	Existing Irrigator	9582	490147
266	R601743728	323.8	A	Covid extension	Dairy	Dairy, Beef/dairy grazing	Existing Irrigator	44796	569617
267	R002069351	197.5	A	Covid extension	Sheep, Beef/dairy grazing, Arable	Beef/dairy grazing, Arable	New Irrigator		241276
268	330090898	15	A	New to scheme	Arable	Arable	New Irrigator	225	0
269	R600941402	443.6	A & C	B	Beef/Dairy Grazing, Arable	Beef/Dairy Grazing	New Irrigator	21300	479673
270	R002069318	169	A	B	Sheep, Beef/dairy grazing, Arable	Sheep, Arable	New Irrigator	12850	453941
271	R600507664	24.6	A	B	Sheep, Beef/Dairy Grazing, Arable	Sheep	New Irrigator		150463
272	R002061384	225.8	A	B	Sheep, Beef/dairy grazing, Arable	Sheep, Arable	New Irrigator	13522	609719
273	R601730341	47	A & C	A	Beef/dairy grazing	Sheep, Beef/dairy grazing, Arable	New Irrigator	14684	165267
274	R601730341	424	C	A	Sheep, Beef/dairy grazing	Sheep, Beef/Dairy Grazing	Dryland		0
275	R601730359	69	A	A	Sheep, Arable	Sheep, Arable	New Irrigator		0
276	R601809834	191.9	A	A	Sheep, Beef/dairy grazing	Beef/Dairy Grazing	New Irrigator	17388	338656
278	R601423367	200.8	A	B	Sheep, Beef/dairy grazing	Dairy, Beef/Dairy Grazing	New Irrigator	17413	666444
279	R602503810	131.9	A	Change in ownership	Dairy, Beef/Dairy Grazing	Dairy, Beef/Dairy Grazing	New Irrigator	11621	112799
280	R000398501	231.4	A	Change in farm system	Sheep, Beef/dairy grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator	31402	775828
281	R600853996	129	A	Change in ownership	Sheep, Beef/dairy grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Existing Irrigator		293980
282	R602419789	21.9	A	Change in ownership	Sheep, Beef/Dairy Grazing, Arable	Beef/Dairy Grazing, Arable	New Irrigator	2632	13172
283	R600903217	117.8	A	A	Beef/Dairy Grazing, Arable	Beef/Dairy Grazing, Arable	New Irrigator	8553	379562
284	R002067226	682.4	A	A	Sheep, Beef/Dairy Grazing, Arable	Sheep, Beef/Dairy Grazing, Arable	Mixed	51502	1216809

APPENDIX 2

CRC165686 Condition 18 Summary

Table: CRC165686 Condition 18 Summary

Farm	Grade	Objectives Impacting Grade	Summary of Actions	Reason for C or D Grade
1	C	<ul style="list-style-type: none"> Irrigation Management Nutrient Management 	<ul style="list-style-type: none"> Undertake an application depth and distribution uniformity assessment (bucket test) in accordance with approved industry standards. Upgrade the approach to scheduling irrigation applications to include method of measuring soil moisture status and keep records of this regularly. Where options exist, endeavour to locate winter forage crop in lower risk paddocks away from waterways. Review and update where necessary, the current systems of nutrient management record keeping, to ensure adequate records are kept for future audits 	<p>Concern relating to practices which do not reflect good management practice, for example growing winter feed crops in paddocks which are prone to flooding, not using soil moisture monitoring technology and a lack of some records available (or in the format required i.e. in accordance with industry standards). As discussed before, your farm has a number of challenges with a number of ephemeral waterways on the farm.</p> <p>Note: Soil Moisture Monitoring has been purchased recently.</p>
2	C	<ul style="list-style-type: none"> Collected Animal Effluent 	<ul style="list-style-type: none"> Develop and implement a plan to upgrade the effluent ponds lining so that no more than 1mm of effluent is lost over the course of 24hr period through seepage. 	<p>On-farm environmental risks from farming activities have been identified well and this has enabled the implementation of management strategies. The exception to this is the Collected Animal Effluent Management area – the effluent storage system has not passed the drop test.</p> <p>Note: This is an infrastructure constraint and progress has been made towards understanding possible resolutions and selecting a preferred option.</p>
3	C	<ul style="list-style-type: none"> Collected Animal Effluent Management 	<ul style="list-style-type: none"> Undertake an application depth and distribution uniformity assessment (bucket test) on effluent irrigator and adjust if necessary, to ensure it is applying the correct amount for the soil type. Ensure effluent is not applied when soil conditions are saturated or near field capacity. Consider options for effluent irrigator fail safe measures and install preferred option. Implement a preferred option of increasing effluent storage to ensure there is sufficient storage to cover periods when soil conditions are not suitable for effluent irrigating. Implement preferred option. 	<p>On-farm environmental risks have been identified well and this has enabled the development and implementation of sound management strategies. The exception to this is the Collected Animal Effluent Management area – the effluent storage capacity is unlikely to be sufficient during periods of wet weather.</p> <p>Note: This is an infrastructure constraint and there are evident plans in place to upgrade the effluent storage.</p>
4	C	<ul style="list-style-type: none"> Collected Animal Effluent Management 	<ul style="list-style-type: none"> Ensure that effluent is not applied when soil conditions are saturated or near field capacity. Increase the effluent storage to ensure that there is sufficient storage to cover periods when the soil conditions are not suitable for effluent irrigating. Implement the preferred option. 	<p>Insufficient effluent storage that requires effluent to be spread every few days even in winter when soil conditions are possibly at or near field capacity.</p> <p>Note: There is a written plan in place to upgrade the effluent storage by the end of the season.</p>
5	C	<ul style="list-style-type: none"> Irrigation Management Nutrient Management Mahinga Kai Management – Selwyn Waihora 	<ul style="list-style-type: none"> Provide commissioning documentation for each pivot at the next obtained from PGG Wrightsons and/or Sustainable Water. Complete amendments required to pivot irrigators to ensure they are operating with DU's above 0.80 and have accurate application depths. Produce servicing and maintenance records at the next audit. Implement a method of quantitative soil moisture monitoring that is used to assist scheduling of irrigation. Amend the nutrient budget to ensure it receives a high level of robustness. Provide spread test calibration report for fertiliser spreader at the next audit. Continue to increase the level of confidence over other objectives so Mahinga Kai is protected. Continue through with plan to obtain funds for native plantings around waterways. 	<p>Low level of robustness in the nutrient budget which does not represent the farm accurately.</p> <p>Lack of records in some management areas. Produce servicing and maintenance records for pivots. Note: servicing has been booked in since the last audit.</p> <p>Implement a method of quantitative soil moisture monitoring. Note: This has been investigated since the audit.</p> <p>Note: The nutrient budget is being updated currently and a planting plan has been developed for the property for 18,500 native plants around the waterways. The first plant out has been funded and will be completed in Spring 2020.</p>

Farm	Grade	Objectives Impacting Grade	Summary of Actions	Reason for C or D Grade
6	C	<ul style="list-style-type: none"> Irrigation Management Nutrient Management Collected Animal Effluent Management 	<ul style="list-style-type: none"> Upgrade the approach to scheduling irrigation applications to include an objective method of measuring soil moisture status (e.g. soil moisture tapes, probes, or water balance). Develop a wet weather grazing plan. Identify key effluent management risks and put in place written procedures to manage these risks. Undertake an application depth and distribution uniformity assessment (bucket test) on effluent irrigator and adjust if necessary, to ensure it is applying the correct amount for the soil type. Ensure effluent is not applied when soil conditions are saturated or near field capacity. 	Some of the required actions from the previous audit have not been implemented / completed.
7	C	<ul style="list-style-type: none"> Irrigation Management Nutrient Management 	<ul style="list-style-type: none"> Prepare and implement an irrigation system regular maintenance schedule. Undertake application depth and distribution uniformity assessments (bucket tests) on all irrigation systems. Upgrade the approach to scheduling irrigation applications to include an objective method of measuring soil moisture status. (e.g. Soil moisture tapes, probe, or water balance). Develop and implement an improved approach to irrigation management record keeping as an aid to better irrigation management. Review and update where necessary, the current systems of nutrient management record keeping, to ensure adequate records are kept for future audits (soil test results, advisors recommendation reports, fertiliser applications). 	<p>There is medium confidence that environmental risks are being mitigated.</p> <p>In all management areas, on farm environmental risks were able to be identified, however there was a lack of evidence/records supporting the discussions around the practices to minimise environmental risks.</p>
8	C	<ul style="list-style-type: none"> Irrigation Management Nutrient Management Soils Management Collected Animal Effluent Management Waterbody Management (riparian areas, drains, rivers, lakes, wetlands) Mahinga Kai Management – Selwyn Waihora 	<ul style="list-style-type: none"> Undertake application depth and distribution uniformity assessments (bucket tests) on all irrigators. Ensure irrigation management training is provided for those staff that re actively involved in the operation of the system and keep records of this. Update the map in the Farm Environmental Plan to reflect the areas which are irrigated by the gun. Use the nutrient budget tool to understand sensitivities of the Overseer model to heifers being wintered on farm this winter. It does not appear that any modelling has been done to verify that the farms nitrogen baseline allows scope for this. Develop a pan which identifies potential risks associated with phosphorus and/or sediment losses from the property adversely impacting sites with Mahinga kai values (springs, wetlands, and habitat). Implement mitigations strategies which address the effects of these risks. Identify critical nutrient source areas on a map. Develop and implement a plan which details how these areas will be managed to remediate or mitigate effects in these areas. Ensure appropriate plans are in place to manage erosion caused through grazing practices. Have a Dairy Effluent Storage Calculation done for the property to verify the adequacy of the effluent storage system. In addition to the effluent application records kept, keep records of where the effluent is applied under pivot 2. Undertake a bucket test on effluent irrigator and adjust if necessary, to ensure it is applying the correct amount for the soil type. Ensure staff with effluent management responsibilities are adequately trained in the management of the effluent system. Undertake necessary actions to remove blockage between first and second ponds and minimise the risk if effluent pond overflow. Ensure that all waterways crossings for cattle are either bridged or culverted. Ensure that ephemeral waterways are not grazed when groundwater levels are high and/or there is surface water below. Ensure stock are excluded from waterways, wetlands, springs, and riparian margins and known Mahinga kai sites. Put in place a programme to ensure that all paddock low spots adjacent to waterways are fenced off and developed as filter areas for any runoff from adjoining paddocks. Put in place specific measures to eliminate runoff to waterways from tracks, races, troughs, self-feeding areas, stock yards and stock camp wallows. 	<p>There is a lower level of confidence that the farm is on track to implementing good management practice. In some management areas the on-farm environmental risks were adequately identified, and they were able to discuss how these risks are being managed, however, in field observation identified some environmental risks were evident which have not been adequately identified or plans put in place and implemented to minimise environmental risks, and this is what many of the actions relate to.</p> <p>There were also actions in the Farm Environmental Plan or previous audit report that have not been implemented.</p>

