

Wainui Wastewater Treatment Plant

Annual Monitoring Report for CRC213608 June 2021 – July 2022

Prepared by: Vanessa Irvine, Resource Consent Compliance Coordinator

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Introduction and Summary

The last 12 months over 2021 to 2022 has been a busy one for the Wainui Wastewater Treatment Plant. The existing maintenance and operation team finished up their contract on the 22nd November 2021 and left the plant with minimal handover, to the newly formed in-house Banks Peninsula Treatment Team. It has been a steep learning curve as the team has become familiar with the plant operation.

We are excited to go forward into this busy Summer period, as all the holiday home owners flock in from September. We have with us the operational knowledge gained over the winter, as well as with more time to plan for the influx.

1. Daily Discharge Flow Records

Date	Plant flow (m ³)						
	Wainui WWTP(PS626)	Daily	Consent limit	Rolling weekly average	Consent limit	Rolling yearly average	Consent limit
1/07/2021		12.5	250	4.1	244	3.6	125
2/07/2021		0.4	250	4.1	244	3.6	125
3/07/2021		2.9	250	4.5	244	3.6	125
4/07/2021		3.5	250	5.0	244	3.6	125
5/07/2021		3.3	250	5.5	244	3.6	125
6/07/2021		0.0	250	4.6	244	3.6	125
7/07/2021		0.0	250	3.2	244	3.6	125
8/07/2021		5.7	250	2.3	244	3.6	125
9/07/2021		0.0	250	2.2	244	3.5	125
10/07/2021		0.0	250	1.8	244	3.5	125
11/07/2021		0.0	250	1.3	244	3.5	125
12/07/2021		2.9	250	1.2	244	3.5	125
13/07/2021		3.8	250	1.8	244	3.5	125
14/07/2021		16.6	250	4.1	244	3.5	125
15/07/2021		0.0	250	3.3	244	3.5	125
16/07/2021		0.0	250	3.3	244	3.5	125
17/07/2021		0.0	250	3.3	244	3.5	125
18/07/2021		0.0	250	3.3	244	3.5	125
19/07/2021		3.3	250	3.4	244	3.5	125
20/07/2021		6.4	250	3.8	244	3.5	125
21/07/2021		0.0	250	1.4	244	3.5	125
22/07/2021		0.4	250	1.4	244	3.5	125
23/07/2021		0.0	250	1.4	244	3.5	125
24/07/2021		0.0	250	1.4	244	3.5	125
25/07/2021		11.5	250	3.1	244	3.5	125
26/07/2021		0.0	250	2.6	244	3.5	125
27/07/2021		0.0	250	1.7	244	3.5	125
28/07/2021		0.0	250	1.7	244	3.5	125
29/07/2021		15.3	250	3.8	244	3.6	125
30/07/2021		9.7	250	5.2	244	3.6	125
31/07/2021		0.0	250	5.2	244	3.6	125
1/08/2021		0.0	250	0.0	244	3.6	125

2/08/2021		0.4	250	0.1	244	3.6	125
3/08/2021	Error		250	0.1	244	3.6	125
4/08/2021		4.7	250	1.3	244	3.6	125
5/08/2021		0.0	250	1.0	244	3.6	125
6/08/2021		1.5	250	1.1	244	3.6	125
7/08/2021		0.0	250	1.1	244	3.6	125
8/08/2021		0.0	250	1.1	244	3.6	125
9/08/2021		1.4	250	1.3	244	3.6	125
10/08/2021		0.0	250	1.1	244	3.6	125
11/08/2021		0.0	250	0.4	244	3.6	125
12/08/2021		0.0	250	0.4	244	3.6	125
13/08/2021		3.6	250	0.7	244	3.6	125
14/08/2021		0.0	250	0.7	244	3.6	125
15/08/2021		2.3	250	1.0	244	3.6	125
16/08/2021		6.3	250	1.8	244	3.6	125
17/08/2021		0.0	250	1.8	244	3.6	125
18/08/2021		2.8	250	2.2	244	3.6	125
19/08/2021		0.0	250	2.2	244	3.6	125
20/08/2021		4.7	250	2.3	244	3.6	125
21/08/2021		0.0	250	2.3	244	3.6	125
22/08/2021		6.3	250	2.9	244	3.6	125
23/08/2021		0.0	250	2.0	244	3.6	125
24/08/2021		3.0	250	2.4	244	3.6	125
25/08/2021		0.0	250	2.0	244	3.6	125
26/08/2021		4.7	250	2.7	244	3.6	125
27/08/2021		0.0	250	2.0	244	3.6	125
28/08/2021		0.0	250	2.0	244	3.6	125
29/08/2021		0.0	250	1.1	244	3.5	125
30/08/2021		4.7	250	1.8	244	3.5	125
31/08/2021		0.0	250	1.3	244	3.5	125
1/09/2021		0.0	250	1.3	244	3.5	125
2/09/2021		4.7	250	1.3	244	3.5	125
3/09/2021		0.0	250	1.3	244	3.5	125
4/09/2021		0.0	250	1.3	244	3.5	125
5/09/2021		0.0	250	1.3	244	3.5	125
6/09/2021		6.4	250	1.6	244	3.5	125
7/09/2021		0.0	250	1.6	244	3.5	125
8/09/2021		0.0	250	1.6	244	3.5	125
9/09/2021		9.9	250	2.3	244	3.4	125
10/09/2021		0.0	250	2.3	244	3.4	125
11/09/2021		3.0	250	2.8	244	3.4	125
12/09/2021		0.0	250	2.8	244	3.4	125
13/09/2021		0.0	250	1.8	244	3.4	125
14/09/2021		0.0	250	1.8	244	3.4	125
15/09/2021		0.0	250	1.8	244	3.4	125
16/09/2021		1.0	250	0.6	244	3.4	125
17/09/2021		0.0	250	0.6	244	3.4	125
18/09/2021		3.0	250	0.6	244	3.4	125
19/09/2021		0.0	250	0.6	244	3.4	125
20/09/2021		4.0	250	1.1	244	3.4	125
21/09/2021		0.0	250	1.1	244	3.4	125
22/09/2021		0.0	250	1.1	244	3.4	125

23/09/2021	0.0	250	1.0	244	3.4	125
24/09/2021	0.0	250	1.0	244	3.4	125
25/09/2021	6.4	250	1.5	244	3.5	125
26/09/2021	0.0	250	1.5	244	3.5	125
27/09/2021	0.0	250	0.9	244	3.5	125
28/09/2021	2.8	250	1.3	244	3.5	125
29/09/2021	3.0	250	1.7	244	3.5	125
30/09/2021	0.0	250	1.7	244	3.5	125
1/10/2021	4.0	250	2.3	244	3.5	125
2/10/2021	0.0	250	1.4	244	3.5	125
3/10/2021	5.0	250	2.1	244	3.5	125
4/10/2021	4.4	250	2.7	244	3.5	125
5/10/2021	0.0	250	2.3	244	3.5	125
6/10/2021	2.0	250	2.2	244	3.4	125
7/10/2021	3.1	250	2.6	244	3.5	125
8/10/2021	4.3	250	2.7	244	3.4	125
9/10/2021	4.4	250	3.3	244	3.4	125
10/10/2021	4.4	250	3.2	244	3.4	125
11/10/2021	0.0	250	2.6	244	3.4	125
12/10/2021	7.6	250	3.7	244	3.4	125
13/10/2021	32.0	250	8.0	244	3.5	125
14/10/2021	12.8	250	9.4	244	3.5	125
15/10/2021	11.4	250	10.4	244	3.6	125
16/10/2021	5.5	250	10.5	244	3.6	125
17/10/2021	2.2	250	10.2	244	3.6	125
18/10/2021	5.0	250	10.9	244	3.6	125
19/10/2021	6.6	250	10.8	244	3.6	125
20/10/2021	0.2	250	6.2	244	3.6	125
21/10/2021	6.1	250	5.3	244	3.6	125
22/10/2021	2.8	250	4.1	244	3.6	125
23/10/2021	0.2	250	3.3	244	3.6	125
24/10/2021	4.0	250	3.6	244	3.6	125
25/10/2021	0.0	250	2.8	244	3.5	125
26/10/2021	6.0	250	2.8	244	3.5	125
27/10/2021	0.0	250	2.7	244	3.5	125
28/10/2021	2.0	250	2.1	244	3.5	125
29/10/2021	5.0	250	2.5	244	3.5	125
30/10/2021	6.0	250	3.3	244	3.5	125
31/10/2021	1.9	250	3.0	244	3.5	125
1/11/2021	4.2	250	3.6	244	3.5	125
2/11/2021	0.0	250	2.7	244	3.5	125
3/11/2021	2.0	250	3.0	244	3.5	125
4/11/2021	3.0	250	3.2	244	3.5	125
5/11/2021	5.0	20	3.2	15.9	3.5	6.1
6/11/2021	0.0	20	2.3	15.9	3.5	6.1
7/11/2021	0.0	20	2.0	15.9	3.5	6.1
8/11/2021	0.0	20	1.4	15.9	3.4	6.1
9/11/2021	3.0	20	1.9	15.9	3.4	6.1
10/11/2021	2.0	20	1.9	15.9	3.4	6.1
11/11/2021	1.0	20	1.6	15.9	3.4	6.1
12/11/2021	0.0	20	0.9	15.9	3.4	6.1
13/11/2021	2.0	20	1.1	15.9	3.4	6.1

14/11/2021	1.0	20	1.3	15.9	3.4	6.1
15/11/2021	2.0	20	1.6	15.9	3.3	6.1
16/11/2021	2.0	20	1.4	15.9	3.3	6.1
17/11/2021	1.0	20	1.3	15.9	3.3	6.1
18/11/2021	2.0	20	1.4	15.9	3.3	6.1
19/11/2021	3.0	20	1.9	15.9	3.3	6.1
20/11/2021	3.0	20	2.0	15.9	3.3	6.1
21/11/2021	4.0	20	2.4	15.9	3.3	6.1
22/11/2021	1.0	20	2.3	15.9	3.3	6.1
23/11/2021	3.0	20	2.4	15.9	3.3	6.1
24/11/2021	2.0	20	2.6	15.9	3.3	6.1
25/11/2021	0.4	20	2.3	15.9	3.3	6.1
26/11/2021	1.6	20	2.1	15.9	3.3	6.1
27/11/2021	3.4	20	2.2	15.9	3.3	6.1
28/11/2021	3.0	20	2.1	15.9	3.3	6.1
29/11/2021	2.0	20	2.2	15.9	3.2	6.1
30/11/2021	2.5	20	2.1	15.9	3.3	6.1
1/12/2021	1.0	20	2.0	15.9	3.2	6.1
2/12/2021	2.0	20	2.2	15.9	3.2	6.1
3/12/2021	2.0	20	2.3	15.9	3.2	6.1
4/12/2021	6.0	20	2.6	15.9	3.2	6.1
5/12/2021	3.0	20	2.6	15.9	3.3	6.1
6/12/2021	4.0	20	2.9	15.9	3.3	6.1
7/12/2021	3.3	20	3.0	15.9	3.3	6.1
8/12/2021	3.0	20	3.3	15.9	3.3	6.1
9/12/2021	0.0	20	3.0	15.9	3.3	6.1
10/12/2021	5.0	20	3.5	15.9	3.3	6.1
11/12/2021	2.0	20	2.9	15.9	3.3	6.1
12/12/2021	2.0	20	2.8	15.9	3.3	6.1
13/12/2021	2.0	20	2.5	15.9	3.2	6.1
14/12/2021	3.0	20	2.4	15.9	3.2	6.1
15/12/2021	2.0	20	2.3	15.9	3.2	6.1
16/12/2021	16.0	20	4.6	15.9	3.3	6.1
17/12/2021	2.0	20	4.1	15.9	3.3	6.1
18/12/2021	4.0	20	4.4	15.9	3.3	6.1
19/12/2021	2.0	20	4.4	15.9	3.3	6.1
20/12/2021	2.0	20	4.4	15.9	3.2	6.1
21/12/2021	2.0	20	4.3	15.9	3.2	6.1
22/12/2021	3.0	20	4.4	15.9	3.2	6.1
23/12/2021	2.0	20	2.4	15.9	3.2	6.1
24/12/2021	2.0	20	2.4	15.9	3.2	6.1
25/12/2021	1.0	20	2.0	15.9	3.2	6.1
26/12/2021	5.0	20	2.4	15.9	3.2	6.1
27/12/2021	3.1	20	2.6	15.9	3.1	6.1
28/12/2021	2.9	20	2.7	15.9	3.1	6.1
29/12/2021	5.0	20	3.0	15.9	3.1	6.1
30/12/2021	4.0	20	3.3	15.9	3.1	6.1
31/12/2021	5.6	20	3.8	15.9	3.1	6.1
1/01/2022	0.0	20	3.7	15.9	3.0	6.1
2/01/2022	4.0	20	3.5	15.9	3.0	6.1
3/01/2022	0.0	20	3.1	15.9	3.0	6.1
4/01/2022	2.0	20	2.9	15.9	3.0	6.1

5/01/2022	0.0	20	2.2	15.9	3.0	6.1
6/01/2022	2.0	20	1.9	15.9	3.0	6.1
7/01/2022	0.0	20	1.1	15.9	3.0	6.1
8/01/2022	4.0	20	1.7	15.9	3.0	6.1
9/01/2022	1.0	20	1.3	15.9	3.0	6.1
10/01/2022	1.9	20	1.6	15.9	2.9	6.1
11/01/2022	2.1	20	1.6	15.9	2.9	6.1
12/01/2022	3.0	20	2.0	15.9	2.9	6.1
13/01/2022	2.0	20	2.0	15.9	2.9	6.1
14/01/2022	2.0	20	2.3	15.9	2.9	6.1
15/01/2022	5.0	20	2.4	15.9	2.9	6.1
16/01/2022	2.0	20	2.6	15.9	2.9	6.1
17/01/2022	2.0	20	2.6	15.9	2.9	6.1
18/01/2022	2.8	20	2.7	15.9	3.0	6.1
19/01/2022	0.0	20	2.3	15.9	2.9	6.1
20/01/2022	2.0	20	2.3	15.9	2.9	6.1
21/01/2022	4.0	20	2.5	15.9	2.9	6.1
22/01/2022	2.0	20	2.1	15.9	2.9	6.1
23/01/2022	3.0	20	2.3	15.9	2.9	6.1
24/01/2022	2.0	20	2.3	15.9	2.9	6.1
25/01/2022	2.0	20	2.1	15.9	2.9	6.1
26/01/2022	0.0	20	2.1	15.9	2.9	6.1
27/01/2022	2.0	20	2.1	15.9	2.9	6.1
28/01/2022	5.0	20	2.3	15.9	2.9	6.1
29/01/2022	4.0	20	2.6	15.9	2.9	6.1
30/01/2022	5.0	20	2.9	15.9	2.9	6.1
31/01/2022	1.0	20	2.7	15.9	2.9	6.1
1/02/2022	0.9	20	2.6	15.9	2.9	6.1
2/02/2022	0.0	20	2.6	15.9	2.8	6.1
3/02/2022	0.0	20	2.3	15.9	2.8	6.1
4/02/2022	2.0	20	1.8	15.9	2.8	6.1
5/02/2022	4.0	20	1.8	15.9	2.8	6.1
6/02/2022	5.0	20	1.8	15.9	2.8	6.1
7/02/2022	4.0	20	2.3	15.9	2.8	6.1
8/02/2022	0.0	20	2.1	15.9	2.8	6.1
9/02/2022	2.0	20	2.4	15.9	2.8	6.1
10/02/2022	4.0	20	3.0	15.9	2.8	6.1
11/02/2022	2.0	20	3.0	15.9	2.8	6.1
12/02/2022	4.0	20	3.0	15.9	2.8	6.1
13/02/2022	11.0	20	3.9	15.9	2.8	6.1
14/02/2022	0.0	20	3.3	15.9	2.8	6.1
15/02/2022	0.0	20	3.3	15.9	2.8	6.1
16/02/2022	0.0	20	3.0	15.9	2.8	6.1
17/02/2022	0.0	20	2.4	15.9	2.8	6.1
18/02/2022	0.0	20	2.1	15.9	2.8	6.1
19/02/2022	0.0	20	1.6	15.9	2.8	6.1
20/02/2022	0.0	20	0.0	15.9	2.8	6.1
21/02/2022	4.0	20	0.6	15.9	2.8	6.1
22/02/2022	3.0	20	1.0	15.9	2.8	6.1
23/02/2022	0.0	20	1.0	15.9	2.8	6.1
24/02/2022	2.0	20	1.3	15.9	2.8	6.1
25/02/2022	4.0	20	1.9	15.9	2.8	6.1

26/02/2022	2.0	20	2.1	15.9	2.8	6.1
27/02/2022	4.0	20	2.7	15.9	2.8	6.1
28/02/2022	2.0	20	2.4	15.9	2.8	6.1
1/03/2022	2.0	20	2.3	15.9	2.8	6.1
2/03/2022	2.0	20	2.6	15.9	2.8	6.1
3/03/2022	2.0	20	2.6	15.9	2.8	6.1
4/03/2022	3.0	20	2.4	15.9	2.8	6.1
5/03/2022	6.0	20	3.0	15.9	2.8	6.1
6/03/2022	5.0	20	3.1	15.9	2.8	6.1
7/03/2022	1.2	20	3.0	15.9	2.8	6.1
8/03/2022	1.0	20	2.9	15.9	2.8	6.1
9/03/2022	2.0	20	2.9	15.9	2.8	6.1
10/03/2022	2.0	20	2.9	15.9	2.8	6.1
11/03/2022	2.0	20	2.7	15.9	2.8	6.1
12/03/2022	3.0	20	2.3	15.9	2.8	6.1
13/03/2022	1.0	20	1.7	15.9	2.8	6.1
14/03/2022	4.0	20	2.1	15.9	2.8	6.1
15/03/2022	0.0	20	2.0	15.9	2.8	6.1
16/03/2022	2.0	20	2.0	15.9	2.8	6.1
17/03/2022	1.0	20	1.9	15.9	2.8	6.1
18/03/2022	2.3	20	1.9	15.9	2.8	6.1
19/03/2022	2.7	20	1.9	15.9	2.8	6.1
20/03/2022	3.0	20	2.1	15.9	2.8	6.1
21/03/2022	2.0	20	1.9	15.9	2.8	6.1
22/03/2022	4.0	20	2.4	15.9	2.8	6.1
23/03/2022	2.0	20	2.4	15.9	2.8	6.1
24/03/2022	1.0	20	2.4	15.9	2.8	6.1
25/03/2022	2.0	20	2.4	15.9	2.8	6.1
26/03/2022	3.1	20	2.4	15.9	2.8	6.1
27/03/2022	3.3	20	2.5	15.9	2.8	6.1
28/03/2022	1.1	20	2.4	15.9	2.8	6.1
29/03/2022	0.0	20	1.8	15.9	2.8	6.1
30/03/2022	1.9	20	1.8	15.9	2.8	6.1
31/03/2022	0.0	20	1.6	15.9	2.8	6.1
1/04/2022	2.2	20	1.7	15.9	2.8	6.1
2/04/2022	1.1	20	1.4	15.9	2.8	6.1
3/04/2022	3.3	20	1.4	15.9	2.8	6.1
4/04/2022	1.1	20	1.4	15.9	2.8	6.1
5/04/2022	0.0	20	1.4	15.9	2.8	6.1
6/04/2022	2.2	20	1.4	15.9	2.8	6.1
7/04/2022	3.3	20	1.9	15.9	2.8	6.1
8/04/2022	2.2	20	1.9	15.9	2.8	6.1
9/04/2022	1.1	20	1.9	15.9	2.8	6.1
10/04/2022	2.2	20	1.7	15.9	2.8	6.1
11/04/2022	2.2	20	1.9	15.9	2.8	6.1
12/04/2022	3.3	20	2.4	15.9	2.8	6.1
13/04/2022	1.1	20	2.2	15.9	2.8	6.1
14/04/2022	3.3	20	2.2	15.9	2.8	6.1
15/04/2022	3.3	20	2.4	15.9	2.8	6.1
16/04/2022	7.7	20	3.3	15.9	2.8	6.1
17/04/2022	26.4	20	6.8	15.9	2.9	6.1
18/04/2022	0.0	20	6.4	15.9	2.9	6.1

19/04/2022	0.0	20	6.0	15.9	2.9	6.1
20/04/2022	0.0	20	5.8	15.9	2.9	6.1
21/04/2022	0.0	20	5.3	15.9	2.8	6.1
22/04/2022	0.0	20	4.9	15.9	2.8	6.1
23/04/2022	0.0	20	3.8	15.9	2.8	6.1
24/04/2022	1.1	20	0.2	15.9	2.8	6.1
25/04/2022	0.0	20	0.2	15.9	2.8	6.1
26/04/2022	0.0	20	0.2	15.9	2.8	6.1
27/04/2022	0.0	20	0.2	15.9	2.8	6.1
28/04/2022	0.0	20	0.2	15.9	2.8	6.1
29/04/2022	0.0	20	0.2	15.9	2.8	6.1
30/04/2022	0.0	20	0.2	15.9	2.7	6.1
1/05/2022	0.0	20	0.0	15.9	2.6	6.1
2/05/2022	0.0	20	0.0	15.9	2.6	6.1
3/05/2022	17.0	20	2.4	15.9	2.7	6.1
4/05/2022	0.0	20	2.4	15.9	2.6	6.1
5/05/2022	0.1	20	2.4	15.9	2.6	6.1
6/05/2022	3.0	20	2.9	15.9	2.6	6.1
7/05/2022	0.0	20	2.9	15.9	2.6	6.1
8/05/2022	0.0	20	2.9	15.9	2.6	6.1
9/05/2022	0.0	20	2.9	15.9	2.6	6.1
10/05/2022	3.0	20	0.9	15.9	2.6	6.1
11/05/2022	0.0	20	0.9	15.9	2.6	6.1
12/05/2022	0.0	20	0.9	15.9	2.6	6.1
13/05/2022	0.0	20	0.4	15.9	2.5	6.1
14/05/2022	4.0	20	1.0	15.9	2.5	6.1
15/05/2022	0.0	20	1.0	15.9	2.5	6.1
16/05/2022	0.0	20	1.0	15.9	2.5	6.1
17/05/2022	0.0	20	0.6	15.9	2.5	6.1
18/05/2022	0.0	20	0.6	15.9	2.5	6.1
19/05/2022	0.0	20	0.6	15.9	2.5	6.1
20/05/2022	3.0	20	1.0	15.9	2.5	6.1
21/05/2022	0.0	20	0.4	15.9	2.5	6.1
22/05/2022	0.0	20	0.4	15.9	2.5	6.1
23/05/2022	0.0	20	0.4	15.9	2.5	6.1
24/05/2022	3.3	20	0.9	15.9	2.5	6.1
25/05/2022	0.0	20	0.9	15.9	2.5	6.1
26/05/2022	0.0	20	0.9	15.9	2.5	6.1
27/05/2022	1.8	20	0.7	15.9	2.5	6.1
28/05/2022	1.5	20	0.9	15.9	2.5	6.1
29/05/2022	0.0	20	0.9	15.9	2.5	6.1
30/05/2022	3.5	20	1.4	15.9	2.5	6.1
31/05/2022	0.0	20	1.0	15.9	2.5	6.1
1/06/2022	0.3	20	1.0	15.9	2.4	6.1
2/06/2022	0.3	20	1.1	15.9	2.4	6.1
3/06/2022	0.4	20	0.9	15.9	2.4	6.1
4/06/2022	0.5	20	0.7	15.9	2.4	6.1
5/06/2022	0.5	20	0.8	15.9	2.4	6.1
6/06/2022	0.5	20	0.4	15.9	2.4	6.1
7/06/2022	0.4	20	0.4	15.9	2.4	6.1
8/06/2022	0.3	20	0.4	15.9	2.4	6.1
9/06/2022	0.3	20	0.4	15.9	2.4	6.1

10/06/2022	0.3	20	0.4	15.9	2.4	6.1
11/06/2022	0.2	20	0.4	15.9	2.4	6.1
12/06/2022	0.2	20	0.3	15.9	2.4	6.1
13/06/2022	0.3	20	0.3	15.9	2.4	6.1
14/06/2022	0.2	20	0.3	15.9	2.4	6.1
15/06/2022	0.2	20	0.3	15.9	2.4	6.1
16/06/2022	0.3	20	0.3	15.9	2.4	6.1
17/06/2022	0.2	20	0.3	15.9	2.4	6.1
18/06/2022	0.3	20	0.3	15.9	2.4	6.1
19/06/2022	0.3	20	0.3	15.9	2.4	6.1
20/06/2022	0.4	20	0.3	15.9	2.3	6.1
21/06/2022	0.2	20	0.3	15.9	2.3	6.1
22/06/2022	0.3	20	0.3	15.9	2.3	6.1
23/06/2022	0.4	20	0.3	15.9	2.3	6.1
24/06/2022	0.5	20	0.3	15.9	2.3	6.1
25/06/2022	0.5	20	0.4	15.9	2.3	6.1
26/06/2022	0.5	20	0.4	15.9	2.3	6.1
27/06/2022	0.3	20	0.4	15.9	2.3	6.1
28/06/2022	0.3	20	0.4	15.9	2.3	6.1
29/06/2022	0.3	20	0.4	15.9	2.3	6.1
30/06/2022	0.3	20	0.4	15.9	2.2	6.1

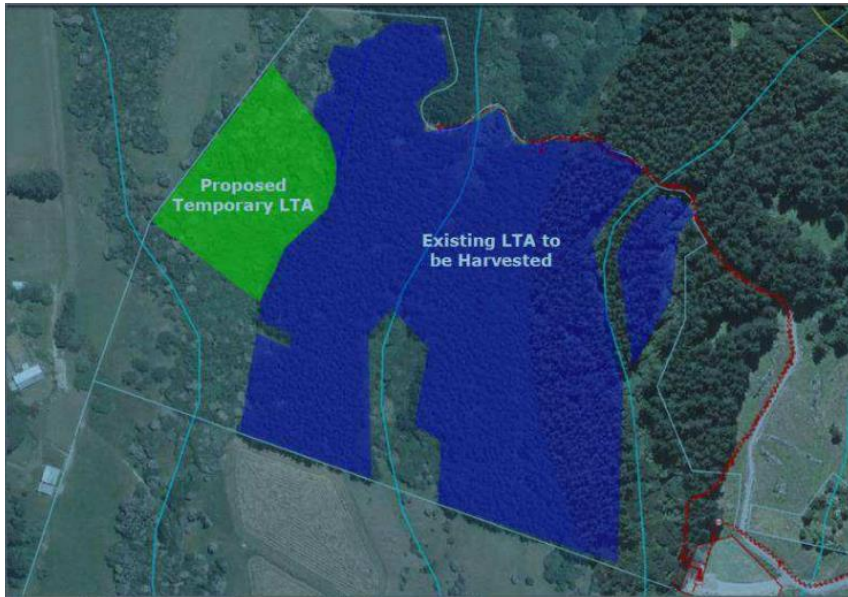
2. Wastewater sampling results

Sample date	Sample time	Sample No.	BOD5 (g/m3)	Total Nitrogen (g/m3)	Faecal coliforms (CFU/100 mL)	Median Faecal coliforms (CFU/100m L)	OK? <10,000/100ml	Suspended solids (g/m3)	Median suspended solids (g/m3)	OK? <20g/m3
24/06/2021	10:20	2109279	1.5	9.9	10	220	YES	11	15	YES
14/07/2021	11:15	2112163	1.5	41	77000	280	NO	9.2	11	YES
26/08/2021	12:15	2113303	3	12	10	280	YES	27	15	YES
15/09/2021	10:50	2116774	2	13	10	10	YES	8.3	11	YES
13/10/2021	10:35	2118444	6.1	20	11000	10	NO	15	11	YES
26/11/2021	11:01	2121382	3	79	30	30	YES	22	15	YES
3/12/2021	10:45	2122637	2	73	260	30	YES	9.4	15	YES
26/01/2022	14:00	2123925	3	59	110	110	YES	4	9.4	YES
1/02/2022	11:30	2201297	8.3	40	23000	260	NO	15	15	YES
3/03/2022	12:30	2202021	2.4	12	10	110	YES	11	11	YES
28/04/2022	8:45	2202941	14	55	27000	260	NO	21	11	YES
24/05/2022	10:15	2204391	3.8	4.4	10	110	YES	12	12	YES
9/06/2022	7:12	2208428	4.7	7.3	40	40	YES	7.3	12	YES
18/07/2022	15:45	2208671	3.8	22	10	10	YES	4	11	YES

4. Irrigation area used

The original Land Treatment Area (as defined by CRC091580) ran through an area of pine plantation. This pine plantation has since matured to the point where it needed to be felled, so as part of this process the treatment area has now moved to another part of 1R Warnerville Road, Wainui. The temporary LTA has been in use since the Christchurch City Council begun operating and maintaining the Banks Peninsula Treatment plants.

Plan in CRC213608



Temporary LTA within yellow circled area. The LTA is located here as it is where the discharge pipe ends



5. Daily wastewater application rates.

8 (a) From 01 September to 31 May, the wastewater shall be discharged at an annual average hydraulic application rate not exceeding 3.3 millimetres per day. The maximum weekly average hydraulic application rate shall be 7.2 millimetres per day and the maximum daily hydraulic application rate shall be 12 millimetres per day.

(b) At all other times, the wastewater shall be discharged at an average winter application rate of 17.5 mm/week or a 7-day average application rate of 2.5 mm/day.

The weekly summer flow total limit has been interpreted as 7.2mm x 7 days = 50.4mm

The weekly winter flow limit is stated in the consent as 2.5mm x 7 days = 17.5mm

Irrigation Field application rate (m3)					
Irrigation field (TP2504)					
Amount (mm/day)	Daily average	Rolling weekly average	Weekly total limit	Rolling yearly average	Yearly
1.25	2.5	0.4	17.5	0.4	3.3
0.04	2.5	0.4	17.5	0.4	3.3
0.29	2.5	0.4	17.5	0.4	3.3
0.35	2.5	0.5	17.5	0.4	3.3
0.33	2.5	0.5	17.5	0.4	3.3
0.00	2.5	0.5	17.5	0.4	3.3
0.00	2.5	0.3	17.5	0.4	3.3
0.57	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.1	17.5	0.4	3.3
0.29	2.5	0.1	17.5	0.4	3.3
0.38	2.5	0.2	17.5	0.4	3.3
1.66	2.5	0.4	17.5	0.4	3.3
0.00	2.5	0.3	17.5	0.4	3.3
0.00	2.5	0.3	17.5	0.4	3.3
0.00	2.5	0.3	17.5	0.4	3.3
0.00	2.5	0.3	17.5	0.4	3.3
0.33	2.5	0.3	17.5	0.4	3.3
0.64	2.5	0.4	17.5	0.4	3.3
0.00	2.5	0.1	17.5	0.4	3.3
0.04	2.5	0.1	17.5	0.4	3.3
0.00	2.5	0.1	17.5	0.4	3.3
0.00	2.5	0.1	17.5	0.4	3.3
1.15	2.5	0.3	17.5	0.4	3.3
0.00	2.5	0.3	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3

1.53	2.5	0.4	17.5	0.4	3.3
0.97	2.5	0.5	17.5	0.4	3.3
0.00	2.5	0.5	17.5	0.4	3.3
0.00	2.5	0.0	17.5	0.4	3.3
0.04	2.5	0.0	17.5	0.4	3.3
10.96	2.5	2.7	17.5	0.4	3.3
0.47	2.5	2.3	17.5	0.4	3.3
0.00	2.5	1.9	17.5	0.4	3.3
0.15	2.5	1.7	17.5	0.4	3.3
0.00	2.5	1.7	17.5	0.4	3.3
0.00	2.5	1.7	17.5	0.4	3.3
0.14	2.5	1.7	17.5	0.4	3.3
0.00	2.5	0.1	17.5	0.4	3.3
0.00	2.5	0.0	17.5	0.4	3.3
0.00	2.5	0.0	17.5	0.4	3.3
0.36	2.5	0.1	17.5	0.4	3.3
0.00	2.5	0.1	17.5	0.4	3.3
0.23	2.5	0.1	17.5	0.4	3.3
0.63	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.28	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.47	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.63	2.5	0.3	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.30	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.47	2.5	0.3	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.1	17.5	0.4	3.3
0.47	2.5	0.2	17.5	0.4	3.3
0.00	2.5	0.1	17.5	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.47	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.64	12	0.2	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.99	12	0.2	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.30	12	0.3	50.4	0.4	3.3
0.00	12	0.3	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.10	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.30	12	0.1	50.4	0.4	3.3

0.00	12	0.1	50.4	0.4	3.3
0.40	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.64	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.28	12	0.1	50.4	0.4	3.3
0.30	12	0.2	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.40	12	0.2	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.50	12	0.2	50.4	0.4	3.3
0.44	12	0.3	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
0.31	12	0.3	50.4	0.4	3.3
0.43	12	0.3	50.4	0.4	3.3
0.44	12	0.3	50.4	0.4	3.3
0.44	12	0.3	50.4	0.4	3.3
0.00	12	0.3	50.4	0.4	3.3
0.76	12	0.4	50.4	0.4	3.3
3.20	12	0.8	50.4	0.4	3.3
1.28	12	0.9	50.4	0.4	3.3
1.14	12	1.0	50.4	0.4	3.3
0.55	12	1.1	50.4	0.4	3.3
0.22	12	1.0	50.4	0.4	3.3
0.50	12	1.1	50.4	0.4	3.3
0.66	12	1.1	50.4	0.4	3.3
0.02	12	0.6	50.4	0.4	3.3
0.61	12	0.5	50.4	0.4	3.3
0.28	12	0.4	50.4	0.4	3.3
0.02	12	0.3	50.4	0.4	3.3
0.40	12	0.4	50.4	0.4	3.3
0.00	12	0.3	50.4	0.4	3.3
0.60	12	0.3	50.4	0.4	3.3
0.00	12	0.3	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
0.50	12	0.2	50.4	0.4	3.3
0.60	12	0.3	50.4	0.4	3.3
0.19	12	0.3	50.4	0.4	3.3
0.42	12	0.4	50.4	0.4	3.3
0.00	12	0.3	50.4	0.4	3.3
0.20	12	0.3	50.4	0.4	3.3
0.30	12	0.3	50.4	0.4	3.3
0.50	12	0.3	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.00	12	0.2	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.30	12	0.2	50.4	0.4	3.3

0.20	12	0.2	50.4	0.4	3.3
0.10	12	0.2	50.4	0.4	3.3
0.00	12	0.1	50.4	0.4	3.3
0.20	12	0.1	50.4	0.4	3.3
0.10	12	0.1	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
0.20	12	0.1	50.4	0.4	3.3
0.10	12	0.1	50.4	0.4	3.3
0.20	12	0.1	50.4	0.4	3.3
0.30	12	0.2	50.4	0.4	3.3
0.30	12	0.2	50.4	0.4	3.3
0.40	12	0.2	50.4	0.4	3.3
0.10	12	0.2	50.4	0.4	3.3
0.30	12	0.2	50.4	0.4	3.3
0.20	12	0.3	50.4	0.4	3.3
0.04	12	0.2	50.4	0.4	3.3
0.16	12	0.2	50.4	0.4	3.3
0.34	12	0.2	50.4	0.4	3.3
0.30	12	0.2	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
0.25	12	0.2	50.4	0.4	3.3
0.10	12	0.2	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
0.60	12	0.3	50.4	0.4	3.3
0.30	12	0.3	50.4	0.4	3.3
0.40	12	0.3	50.4	0.4	3.3
0.33	12	0.3	50.4	0.4	3.3
0.30	12	0.3	50.4	0.4	3.3
0.00	12	0.3	50.4	0.4	3.3
0.50	12	0.3	50.4	0.4	3.3
0.20	12	0.3	50.4	0.4	3.3
0.20	12	0.3	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
0.30	12	0.2	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
1.60	12	0.5	50.4	0.4	3.3
0.20	12	0.4	50.4	0.4	3.3
0.40	12	0.4	50.4	0.4	3.3
0.20	12	0.4	50.4	0.4	3.3
0.20	12	0.4	50.4	0.4	3.3
0.20	12	0.4	50.4	0.4	3.3
0.30	12	0.4	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
0.20	12	0.2	50.4	0.4	3.3
0.10	12	0.2	50.4	0.4	3.3
0.50	12	0.2	50.4	0.4	3.3
0.31	12	0.3	50.4	0.4	3.3
0.29	12	0.3	50.4	0.3	3.3
0.50	12	0.3	50.4	0.3	3.3
0.40	12	0.3	50.4	0.3	3.3
0.56	12	0.4	50.4	0.3	3.3

0.00	12	0.4	50.4	0.3	3.3
0.40	12	0.4	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.20	12	0.3	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.40	12	0.2	50.4	0.3	3.3
0.10	12	0.1	50.4	0.3	3.3
0.19	12	0.2	50.4	0.3	3.3
0.21	12	0.2	50.4	0.3	3.3
0.30	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.50	12	0.2	50.4	0.3	3.3
0.20	12	0.3	50.4	0.3	3.3
0.20	12	0.3	50.4	0.3	3.3
0.28	12	0.3	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.40	12	0.3	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.30	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.50	12	0.2	50.4	0.3	3.3
0.40	12	0.3	50.4	0.3	3.3
0.50	12	0.3	50.4	0.3	3.3
0.10	12	0.3	50.4	0.3	3.3
0.09	12	0.3	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.40	12	0.2	50.4	0.3	3.3
0.50	12	0.2	50.4	0.3	3.3
0.40	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.40	12	0.3	50.4	0.3	3.3
0.20	12	0.3	50.4	0.3	3.3
0.40	12	0.3	50.4	0.3	3.3
1.10	12	0.4	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.0	50.4	0.3	3.3
0.40	12	0.1	50.4	0.3	3.3

0.30	12	0.1	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.20	12	0.1	50.4	0.3	3.3
0.40	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.40	12	0.3	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.20	12	0.3	50.4	0.3	3.3
0.20	12	0.3	50.4	0.3	3.3
0.30	12	0.2	50.4	0.3	3.3
0.60	12	0.3	50.4	0.3	3.3
0.50	12	0.3	50.4	0.3	3.3
0.12	12	0.3	50.4	0.3	3.3
0.10	12	0.3	50.4	0.3	3.3
0.20	12	0.3	50.4	0.3	3.3
0.20	12	0.3	50.4	0.3	3.3
0.20	12	0.3	50.4	0.3	3.3
0.30	12	0.2	50.4	0.3	3.3
0.10	12	0.2	50.4	0.3	3.3
0.40	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.10	12	0.2	50.4	0.3	3.3
0.23	12	0.2	50.4	0.3	3.3
0.27	12	0.2	50.4	0.3	3.3
0.30	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.40	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.10	12	0.2	50.4	0.3	3.3
0.20	12	0.2	50.4	0.3	3.3
0.31	12	0.2	50.4	0.3	3.3
0.33	12	0.2	50.4	0.3	3.3
0.11	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.19	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.55	12	0.2	50.4	0.3	3.3
0.63	12	0.3	50.4	0.3	3.3
0.64	12	0.3	50.4	0.3	3.3
0.66	12	0.4	50.4	0.3	3.3
0.00	12	0.4	50.4	0.3	3.3
0.43	12	0.4	50.4	0.3	3.3
0.75	12	0.5	50.4	0.3	3.3
0.40	12	0.5	50.4	0.3	3.3
0.53	12	0.5	50.4	0.3	3.3
0.34	12	0.4	50.4	0.3	3.3
0.74	12	0.5	50.4	0.3	3.3
0.65	12	0.5	50.4	0.3	3.3
0.51	12	0.6	50.4	0.3	3.3
0.54	12	0.5	50.4	0.3	3.3

0.60	12	0.6	50.4	0.3	3.3
0.72	12	0.6	50.4	0.3	3.3
0.87	12	0.7	50.4	0.3	3.3
0.00	12	0.6	50.4	0.3	3.3
0.00	12	0.5	50.4	0.3	3.3
0.00	12	0.4	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.20	12	0.0	50.4	0.3	3.3
0.00	12	0.0	50.4	0.3	3.3
0.00	12	0.0	50.4	0.3	3.3
0.00	12	0.0	50.4	0.3	3.3
0.00	12	0.0	50.4	0.3	3.3
0.00	12	0.0	50.4	0.3	3.3
0.00	12	0.0	50.4	0.3	3.3
0.00	12	0.0	50.4	0.3	3.3
0.00	12	0.0	50.4	0.3	3.3
0.70	12	0.1	50.4	0.3	3.3
1.07	12	0.3	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.78	12	0.4	50.4	0.3	3.3
0.00	12	0.4	50.4	0.3	3.3
0.00	12	0.4	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.74	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.85	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.86	12	0.2	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.00	12	0.1	50.4	0.3	3.3
0.87	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.00	12	0.2	50.4	0.3	3.3
0.32	12	0.2	50.4	0.3	3.3
0.84	12	0.3	50.4	0.3	3.3
0.00	12	0.3	50.4	0.3	3.3
0.85	12	0.4	50.4	0.3	3.3
0.04	12	0.3	50.4	0.3	3.3
0.00	2.5	0.3	17.5	0.3	3.3
0.00	2.5	0.3	17.5	0.3	3.3
6.61	2.5	1.2	17.5	0.3	3.3
6.28	2.5	2.0	17.5	0.3	3.3
5.98	2.5	2.8	17.5	0.3	3.3

6.31	2.5	3.6	17.5	0.3	3.3
5.45	2.5	4.4	17.5	0.3	3.3
6.07	2.5	5.2	17.5	0.3	3.3
0.00	2.5	5.2	17.5	0.4	3.3
0.00	2.5	4.3	17.5	0.4	3.3
0.00	2.5	3.4	17.5	0.4	3.3
0.00	2.5	2.5	17.5	0.4	3.3
5.15	2.5	2.4	17.5	0.4	3.3
0.00	2.5	1.6	17.5	0.4	3.3
0.00	2.5	0.7	17.5	0.4	3.3
6.09	2.5	1.6	17.5	0.4	3.3
0.18	2.5	1.6	17.5	0.4	3.3
0.18	2.5	1.7	17.5	0.4	3.3
0.18	2.5	1.7	17.5	0.4	3.3
0.18	2.5	1.0	17.5	0.4	3.3
5.31	2.5	1.7	17.5	0.4	3.3
0.62	2.5	1.8	17.5	0.4	3.3
6.26	2.5	1.8	17.5	0.4	3.3
5.65	2.5	2.6	17.5	0.4	3.3
5.78	2.5	3.4	17.5	0.4	3.3
6.16	2.5	4.3	17.5	0.4	3.3
0.00	2.5	4.3	17.5	0.5	3.3
4.76	2.5	4.2	17.5	0.5	3.3
0.00	2.5	4.1	17.5	0.5	3.3
0.00	2.5	3.2	17.5	0.5	3.3

6. Estimated annual Nitrogen load applied to the Irrigation area

Total Nitrogen = 1405 g/m³

/365

= 3.85 g/m³ applied to the irrigation area per day

7. Summary details of inspections, maintenance and upgrades of the wastewater treatment and land application systems since the previous annual report.

The Christchurch City Council took over the operation and maintenance of all the Banks Peninsula Wastewater Treatment Plants on the 22 November 2021. There has unfortunately been very minimal capital expenditure on the Wainui Wastewater Treatment plant for several years, which we are planning to change.

List of planned upgrades to be made to Wainui

- Access track to the irrigation field
- Excavate loose sand in front of filter to ensure the top concrete block is exposed
- Rebuild aging clarifiers
- Replace distribution pipe work - secondary filter bed

- Replace distribution pipe work - primary filter beds
- Retaining wall & handrail to sludge tank, timber steps & handrail up bank
- Repaint of existing corrugated iron shed
- Replace broken vent pipe on primary bed
- Replace strap on bosses, fill around pipe in ground by shed
- Replace broken inspection bend x 2
- Aluminium treadplate covers to sumps in shed & replace hose tap
- Core into Flow Meter chamber & install drain pipe work