

Regional Livestock Exchanges Pty Ltd
Inverell Regional Livestock Exchange (IRLX)
Bannockburn Rd, Inverell NSW 2360
EPL 10802
Livestock Intensive Activities

Point 1 (Effluent)

Sampling Frequency		Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually
Date Sampled	Date Obtained	pH (pH units)	Sodium Adsorption Ratio	Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorus (mg/L)	Biochemical Oxygen Demand (mg/L)
20-Sep-12	7-Dec-13	7.9	3.3	2970	808	65	36	134	280	122	<0.10	143	33.6	172
16-Jan-13	30-Mar-13	7.7	5.4	3150	1060	70	43	233	596	105	0.04	398	113	56
Apr-13 (re-sample)	3-May-13	7.9	3.0	2830	332	69	42	130	344	130	<0.01	140	36.5	61
8-Jul-13	6-Sep-13	7.9	3.0	2930	207	89	56	148	325	95.2	<0.10	145	37	78
29-Jan-14	21-Feb-14	8.0	3.7	4330	337	120	86	217	425	125	<0.10	160	42	80
16-Jul-14	Sep-14	8.0	3.2	3770	397	109	76	180	360	146	<0.05	204	36.3	173
28-Jan-15	Feb-15	7.8	4.1	3130	601	69	55	189	392	98.7	<0.1	169	32.2	76
14-Jul-15	7-Aug-15	7.8	3.1	3320	394	86	54	150	366	156	< 0.1	195	40.2	183
7-Mar-16	14-Mar-16	8.0	3.8	3720	314	91	66	194	481	108	0.02	129	38.2	55
23-Jun-16	26-Sep-16	7.9	3.4	2830	188	67	42	143	336	96	< 0.1	127	32.6	< 2
2-Feb-17	Feb-17	8.0	3.8	2500	203	55	44	136	316	67	< 0.1	99.3	31.4	80
2-Aug-17	19-Sep-18	8.0	2.5	2300	182	63	35	99	241	119	< 0.01	133	29.2	97
31-Jan-18	9-Feb-18	8.1	3.6	-	434	84	74	185	401	75.8	0.04	124	31.1	50
1-Aug-18	30-Aug-18	8.0	3.5	3770	859	100	73	189	346	147	< 0.1	198	45.8	238
27-Mar-19	13-May-19	8.0	4.0	4220	2070	101	78	220	513	128	< 0.1	225	54.6	165
25-Sep-19	Nov-19	8.3	6.0	5252	494	140	103	382	759	196	< 0.05	206	48.1	271
22-Apr-20	1-May-20	8.2	4.6	3800	160	71	65	220	410	110	< 0.05	120	38	85
2-Sep-20	11-Sep-20	8.0	5.7	3600	1200	87	56	280	340	130	2.9	180	41	480
30-Mar-21	31-Mar-21	8.0	2.3	1500	420	45	27	79	220	31	0.025	45	24	190
5-Aug-21	16-Aug-21	7.7	2.0	2000	710	43	25	67	250	78	<0.01	100	28	170
24-Feb-22	4-Mar-22	7.6	3.4	2900	370	73	69	170	330	56	<0.025	88	21	290
19-Aug-22	19-Aug-22	8.2	3.1	2100	240	34	25	98	220	70	<0.005	114	35	200
31-May-23	2-Jun-23	7.9	4.0	2900	570	57	37	160	330	87	<0.005	120	47	350
6-Nov-23	7-Nov-23	7.9	4.3	3800	640	150	110	290	470	90	<0.050	180	47	360
17-Jun-24	26-Jun-24	7.9	3.5	3100	550	77	64	180	330	91	<0.005	120	35	-
27-Nov-24	16-Dec-24	8.0	4.1	3100	150	65	69	200	370	34	0.03	75	36	160
12-May-25	21-May-25	7.6	2.6	2300	1100	50	43	110	290	69	<0.050	90	43	370
20-Oct-25	31-Oct-25	7.7	5.2	3200	400	110	58	190	380	110	<0.025	150	49	590

Point 2 (Spillway of Wet Weather Storage)

Sampling Frequency (each overflow event)										
Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Kjeldahl Nitrogen (mg/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus

Point 3 (Soils -average of topsoil and subsoil from two management units)

Sampling Frequency		Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	3 Yearly	3 Yearly	3 Yearly	3 Yearly	3 Yearly	3 Yearly
Date Sampled	Date Obtained	pH (pH units)	Sodium Adsorption Ratio	Electrical Conductivity (µS/cm)	Exchangeable Calcium (meq/100g)	Exchangeable Magnesium (meq/100g)	Exchangeable Sodium (meq/100g)	Exchangeable Potassium (meq/100g)	Cation Exchange Capacity (meq/100g)	Chloride (mg/kg)	Nitrate (mgN/kg)	Available Phosphorus (mgP/L)	Organic Carbon (%)	Aggregate Stability (%)	Bulk Density (g/cm3)	Saturated Hydraulic Conductivity (mm/hr)	Total Nitrogen (mg/kg)	Total Phosphorus (mg/kg)	Phosphorus Sorption Capacity (mg/kg)	
20-Sep-12		7.8	3.53	123	51.9	23.4	0.9	1.1	77.3	<100	<5.8	3.5	1.49	4.5	1553	2953	1068	191	1680	
8-Jul-13		7.1	3.23	96	44.3	24.6	1	1.8	71.7	60	11.7	5.7	1.88							
16-Jul-14	3-Sep-14	6.7	2.53	203	53.9	25.5	1.3	3.1	83.7	175	56.2	6.9	1.63							
14-Jul-15	7-Aug-15	8.0	4	157.5	48.8	24.8	1.6	1.4	76.5	98	23.3	6	1.25	4	1515	< 84	1272.5	223	1715	
23-Jun-16	26-Sep-16	7.9	4.32	130	50.2	18.7	1.4	2.5	72.8	65	28.4	20.3	1.43							
2-Aug-17	19-Sep-18	8.0	4.21	160.3	41.1	17.6	1.6	2.3	62.6	38	6.9	11.9	1.21							

1-Aug-18	30-Aug-18	7.5	0.28	235	45.5	23	1.7	4.2	74.3	107	49.5	109.5	1.55	2.8	1000	155358	2275	487.5	525
25-Sep-19	12-Nov-19	7.9	7.59	202.3	18.4	8.6	0.8	1.8	29.2	145	59.5	7	1.63						
2-Sep-20	11-Sep-20	7.235	2.3	402.5	34.725	21.5	2.325	1.75	60.3	76.5	71.1	211	2.79						
18-Aug-22	18-Aug-22	7.42	1.35	125	9857.5	3280.5	449.5	2830.5	85.85	21.65	3.455	198.8	2.16	14	1.1	0.03	2595	575.5	816
31-May-23	31-May-23	7.435	1.6	135	5977.5	2120.5	249	1571.5	52.65	15.91	5.23	119.75	1.735						
17-Jun-24	26-Jun-24	6.815	0.6	90	7111	2384	221.5	2299.5	62.3	24	4.63	199.5	2.02						
12-May-25	23-May-25	7.545	0.55	170	7427	2491	304.5	2259.5	65	33.85	17.45	165.5	1.485	54	1.05	0.25	2764.5	556	669.5

Point 4 (Tailwater Pond)
Sampling Frequency (eachoverflow event)

Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)
3/21/2017	3/28/2017	7.52	655	480	0.27	7.96	17.7	5.04	-
3/30/2017	4/26/2017	7.34	442	602	0.11	23.2	31.4	5.55	-
7/9/2021	7/14/2021	701	660	1200	3.7	2.6	12	10	-

Point 5 (Groundwater) Upgradient

Sampling Frequency		Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually
Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Dissolved Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)	Standing Water Level (measured)
20-Sep-12	07-Dec-13	7.98	1390	892	0.5	0.07	0.9	0.05	0.07	594.7
16-Jan-13	30-Mar-13	7.76	1350	866	0.67	0.07	1	0.18	0.16	594.9
08-Jul-13	06-Sep-13	7.84	1330	819	364	0.05	0.8	0.13	0.15	594.9
29-Jan-14	21-Feb-14	7.89	1400	849	0.62	0.01	0.6	0.22	0.09	595.0
16-Jul-14	03-Sep-14	7.75	1340	842	0.58	<0.01	0.6	0.04	0.04	594.8
28-Jan-15	25-Feb-15	7.89	1360	854	0.63	0.03	1.1	0.22	0.12	594.5
14-Jul-15	07-Aug-15	7.89	1340	807	0.68	0.02	0.9	0.12	0.04	594.0
26-Jan-16	14-Mar-16	8.02	1340	749	0.45	0.14	1.2	0.23	0.17	594.1
22-Jul-16	26-Sep-16	7.8	1350	758	0.54	0.03	0.6	0.08	0.05	594.6
02-Jul-17	17-Feb-17	7.88	1350	883	0.64	<0.01	0.6	0.08	0.07	594.4
02-Aug-17	19-Sep-17	7.93	1300	754	0.62	<0.01	0.7	<0.01	0.02	595.6
31-Jan-18	09-Feb-18	7.93	1320	942	0.67	0.03	0.7	0.02	<0.01	596.1
01-Aug-18	30-Aug-18	7.87	1360	764	0.65	0.04	0.6	0.03	0.03	595.0
27-Mar-19	13-May-19	8.14	1320	892	0.76	0.02	0.8	0.09	0.02	595.8
25-Sep-19	12-Nov-19	7.67	1500	824	0.65	<0.01	0.6	0.03	0.02	595.4
22-Apr-20	01-May-20	7.8	1300	910	0.38	0.23	0.6	0.3	0.17	594.1
02-Sep-20	11-Sep-20	7.6	1400	1000	0.23	0.078	0.4	0.2	0.17	594.1
30-Mar-21	31-Mar-21	7.6	1300	910	0.87	0.15	1.4	0.5	0.24	594.4
05-Aug-21	16-Aug-21	7.4	1400	820	0.98	0.25	1.1	0.36	0.5	594.5
24-Feb-22	04-Mar-22	7.7	450	300	<0.005	0.18	0.3	0.2	0.13	595.3
19-Aug-22	19-Aug-22	8.4	1100	700	2.3	3	3.6	0.09	0.74	-
31-May-23	01-Jun-23	7.6	1300	870	1.1	0.43	2.1	1.1	0.46	597.0
06-Nov-23	07-Nov-23	7.5	1400	990	0.68	0.12	1.2	0.77	0.17	598.8
17-Jun-24	26-Jun-24	7.4	1200	750	0.91	2	3.1	0.7	0.43	595.8
27-Nov-24	16-Dec-24	7.5	1300	980	0.14	0.23	0.8	0.4	0.2	595.7
12-May-25	21-May-25	7.6	1200	880	0.99	0.063	1.1	0.5	0.44	595.5
20-Oct-25	31-Oct-25	7.4	950	830	0.55	0.18	1	0.4	0.3	595.4

Point 7 (Creek Upstream)
Sampling Frequency (after every overflow event)

Date Sampled	Date Obtained	pH (pH units)	Sodium Adsorption Ratio	Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Kjeldahl Nitrogen (mg/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)
3/21/2017	3/28/2017	7.79	0.65	270	6	21	12	15	8	0.22	<0.01	1.5	1.5	0.51	-
3/30/2017	4/26/2017	7.65	0.61	146	109	8	5	9	4	0.07	0.22	1.8	2	0.74	-
7/9/2021	7/14/2021	7.1	0.42	94	74	6.2	4	5.4	3	0.038	0.088	1	1.1	0.6	-

Point 8 (Creek Downstream)

Sampling Frequency (after every overflow event)

Date Sampled	Date Obtained	pH (pH units)	Sodium Adsorption Ratio	Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Kjeldahl Nitrogen (mg/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
3/21/2017	3/28/2017	8.29	1.85	5.44	132	21	11	42	71	0.29	0.9	7.3	9	3.13
3/30/2017	4/26/2017	7.47	0.6	179	60	9	5	9	13	0.09	0.39	2.4	2.8	1.29
7/9/2021	7/14/2021	6.9	0.44	100	170	6.1	3	5.2	5.2	0.39	0.25	1.1	1.4	1

Point 13 (Groundwater)

Sampling Frequency		Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually
Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Dissolved Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)	Standing Water Level (measured)
20-Sep-12	07-Dec-13	8.39	985	748	0.09	0.07	0.35	0.86	0.34	592.6
16-Jan-13	30-Mar-13	8.34	922	558	0.05	0.14	0.55	0.64	0.62	591.2
08-Jul-13	06-Sep-13	8.47	911	1018	0.18	0.05	0.55	1.71	0.48	591.8
29-Jan-14	21-Feb-14	8.38	954	581	0.08	0.08	0.35	0.66	0.49	591.6
16-Jul-14	03-Sep-14	8.35	967	821	0.12	<0.01	<0.6	4.74	0.47	590.9
28-Jan-15	25-Feb-15	8.34	970	592	2	0.02	5.9	0.9	0.7	591.0
14-Jul-15	07-Aug-15	8.43	973.5	1164	0.295	0.025	1.1	4.755	0.455	591.0
26-Jan-16	14-Mar-16	8.075	626	474	1.705	0.05	2.65	1.02	0.895	591.5
22-Jul-16	26-Sep-16	8.245	926.5	579	0.495	0.05	1.15	1.31	0.67	591.2
02-Jul-17	17-Feb-17	8.405	881.5	630.5	0.27	< 0.01	0.7	1.895	0.36	591.7
02-Aug-17	19-Sep-17	8.43	883.5	565.5	0.135	0.02	0.35	0.23	0.1	592.8
31-Jan-18	09-Feb-18	8.435	948	670.5	0.155	0.02	0.5	0.465	0.155	593.8
01-Aug-18	30-Aug-18	8.48	945.5	592	0.395	< 0.01	0.4	0.39	0.14	592.3
27-Mar-19	13-May-19	8.62	893	648	0.18	0.03	0.4	0.41	0.14	590.9
25-Sep-19	12-Nov-19	8.61	1043.5	567.5	0.29	0.09	0.45	0.505	0.21	591.2
22-Apr-20	01-May-20	8.4	940	620	0.35	0.05	0.6	0.6	0.57	590.2
02-Sep-20	11-Sep-20	8.3	970	670	0.16	0.01	0.4	0.5	0.53	590.2
30-Mar-21	31-Mar-21	8.3	930	590	3.9	0.27	5.3	0.8	0.69	590.3
05-Aug-21	16-Aug-21	8	1100	650	1.8	0.005	2.1	0.7	0.68	590.4
24-Feb-22	04-Mar-22	7.9	1100	680	3.1	0.005	5.1	1.3	0.84	593.0
19-Aug-22	19-Aug-22	8.1	500	320	0.42	0.58	1.2	0.04	0.26	-
31-May-23	01-Jun-23	7.7	640	400	0.075	2.2	2.5	0.81	0.16	593.0
06-Nov-23	07-Nov-23	8	1200	870	4.8	0.069	7.6	1.5	1.1	592.3
17-Jun-24	26-Jun-24	8.1	1200	750	2.6	0.12	4	1.1	1	591.6
27-Nov-24	16-Dec-24	8	1100	790	2.4	0.005	3.8	1.3	0.78	591.9
12-May-25	21-May-25	8	1000	620	4.3	0.01	4.6	1.2	1	591.4
20-Oct-25	31-Oct-25	7.7	950	570	3.8	<0.005	4.4	1.2	1	591.7

Point 15 (Groundwater)

Sampling Frequency		Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually
Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Dissolved Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)	Standing Water Level (measured)
20-Sep-12	7-Dec-13	8.28	439	288	0.03	0.04	0.3	0.3	0.07	5.13
16-Jan-13	30-Mar-13	8.07	434	276	0.05	0.21	1	0.5	0.1	5.65
8-Jul-13	6-Sep-13	8.18	427	301	0.03	0.04	0.4	0.26	0.11	6.45
29-Jan-14	21-Feb-14	8.06	456	275	0.11	0.17	0.8	0.26	0.1	7.09
16-Jul-14	3-Sep-14	8.12	452	270	0.05	0.06	0.2	0.23	0.13	7.4
28-Jan-15	25-Feb-15	8.11	436	255	0.18	0.24	1.1	0.21	0.15	7.71
14-Jul-15	7-Aug-15	7.91	430	233	0.11	0.06	0.4	0.17	0.15	7.61
26-Jan-16	14-Mar-16	8.15	431	233	0.16	0.01	0.4	0.11	0.09	6.95
22-Jun-16	26-Sep-16	8.05	413	260	0.04	0.05	0.2	0.16	0.13	7.42
2-Feb-17	17-Feb-17	8.13	397	302	0.08	< 0.01	0.3	0.09	0.07	6.23

2-Aug-17	19-Sep-18	8.23	390	216	0.02	< 0.01	< 0.1	0.02	0.03	2.78
31-Jan-18	9-Feb-18	8.2	396	292	0.02	0.09	< 0.1	0.09	0.08	4.1
1-Aug-18	30-Aug-18	8.09	437	221	0.09	< 0.01	< 0.1	0.13	0.13	5.85
27-Mar-19	13-May-19	8.06	396	271	0.1	0.02	0.2	0.15	0.13	6.49
25-Sep-19	12-Nov-19	7.6	446	238	0.01	0.02	< 0.1	0.14	0.16	8.29
22-Apr-20	1-May-20	8.1	410	270	0.074	0.1	0.2	0.2	0.13	8.38
2-Sep-20	11-Sep-20	8	430	340	0.16	0.01	0.2	0.2	0.15	8.4
30-Mar-21	31-Mar-21	8.3	390	270	0.23	0.068	0.3	0.2	0.13	8.2
5-Aug-21	16-Aug-21	7.9	430	260	0.19	0.076	0.3	0.2	0.17	8.1
24-Feb-22	4-Mar-22	7.9	450	300	0.035	0.19	0.3	0.2	0.13	4.7
19-Aug-22	19-Aug-22	7.6	2500	1700	8	6	18	6.9	0.19	-
31-May-23	01-Jun-23	7.9	2000	1300	50	<0.05	74	29	18	5.7
06-Nov-23	07-Nov-23	7.8	640	450	0.05	0.67	1	0.3	0.14	6.1

Point 16 (Groundwater)

Sampling Frequency		Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually
Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Dissolved Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)	Standing Water Level (measured)
20-Sep-12	7-Dec-13	7.71	2100	1360	1.68	0.27	7.4	1.3	0.13	589.9
16-Jan-13	30-Mar-13	7.17	2290	1430	2.88	0.12	14.4	4.26	0.59	589.1
8-Jul-13	6-Sep-13	7.04	2450	2120	7.76	0.03	38.5	9.34	0.48	589.4
29-Jan-14	21-Feb-14	7.43	2400	1440	4.88	0.04	11.8	4.02	0.26	588.4
16-Jul-14	3-Sep-14	7.08	2470	1430	3.42	0.01	12.1	4.12	0.08	588.1
28-Jan-15	25-Feb-15	7.76	2200	1270	5.41	0.03	7.7	3.92	0.12	587.8
14-Jul-15	7-Aug-15	7.05	2830	1760	7	0.02	23.9	9.67	0.14	591.3
26-Jan-16	14-Mar-16	7.52	2420	1370	5.8	0.07	13	8.2	0.68	588.6
22-Jun-16	26-Sep-16	7.28	2280	1230	4.02	0.05	24.4	6.66	0.11	588.0
2-Feb-17	17-Feb-17	7.6	1700	1010	3.76	< 0.01	7.3	4.09	0.42	589.6
2-Aug-17	19-Sep-18	7.74	2280	1370	1.12	< 0.01	13.9	2.9	0.03	591.0
31-Jan-18	9-Feb-18	7.54	1610	1100	2.99	0.23	6.4	1.21	0.2	591.2
1-Aug-18	30-Aug-18	7.39	2230	1130	3.53	0.06	8.3	2.19	0.07	591.3
27-Mar-19	13-May-19	7.47	2400	1460	3.39	0.09	10.9	3.42	0.07	588.7
25-Sep-19	12-Nov-19	7.02	2800	1660	3.05	0.04	8.1	3.62	0.04	588.3
22-Apr-20	1-May-20	7.3	2100	1200	4.4	0.12	6.4	0.8	0.16	587.1
2-Sep-20	11-Sep-20	7	2600	1800	4.9	0.062	7.8	4.7	0.36	587.1
30-Mar-21	31-Mar-21	6.9	2700	2300	7	0.64	13	6.3	0.068	587.3
5-Aug-21	16-Aug-21	7	2800	3400	8.9	0.03	15	7.3	0.1	587.5
24-Feb-22	4-Mar-22	6.9	2700	1800	7.1	0.42	13	6.1	0.11	587.3
19-Aug-22	19-Aug-22	8.2	1600	1000	0.3	4.1	5.6	0.08	0.059	-
31-May-23	01-Jun-23	7.9	2000	1300	50	<0.05	74	29	18	-
06-Nov-23	07-Nov-23	8.1	2100	1600	29	<0.050	60	16	8.4	589.4
17-Jun-24	26-Jun-24	-	-	-	-	-	-	-	-	-
27-Nov-24	16-Dec-24	7.2	1900	1200	5.7	<0.005	9.8	6.3	1.6	588.6
12-May-25	21-May-25	7.3	1900	1300	23	0.37	25	7.9	3.5	588.4
20-Oct-25	31-Oct-25	7	910	1400	8.7	0.19	14	8.4	0.93	-

Point 17 (Groundwater)

Sampling Frequency		Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually
Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Dissolved Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)	Standing Water Level (measured)
20-Sep-12	7-Dec-13	7.83	1860	1160	<0.01	4.5	5.8	0.02	0.02	592.3
16-Jan-13	30-Mar-13	7.58	1770	1050	0.03	4.25	7.3	<0.02	0.02	591.5
8-Jul-13	6-Sep-13	7.66	1690	933	<0.01	4.04	5.4	0.04	0.02	591.2
29-Jan-14	21-Feb-14	7.78	1750	927	0.02	4.61	5.4	0.04	0.01	590.4
16-Jul-14	3-Sep-14	7.6	1660	952	<0.01	5.36	6.1	0.04	0.02	589.8
28-Jan-15	25-Feb-15	7.91	1540	806	0.02	6.01	7.4	0.04	<0.01	589.6
14-Jul-15	7-Aug-15	7.85	1470	800	0.06	4.42	5.2	0.08	0.02	589.5

26-Jan-16	14-Mar-16	7.93	1450	856	< 0.01	3.35	3.9	0.04	0.02	590.2
22-Jun-16	26-Sep-16	7.71	1470	844	0.01	3.73	4.5	0.06	< 0.01	589.6
2-Feb-17	17-Feb-17	7.79	1390	922	< 0.01	1.84	2.4	0.02	0.01	591.3
2-Aug-17	19-Sep-18	7.77	1520	802	0.05	5.16	5.7	< 0.01	0.01	593.8
31-Jan-18	9-Feb-18	7.72	1770	1100	< 0.01	7.25	8.3	0.02	0.01	593.1
1-Aug-18	30-Aug-18	7.7	1840	932	0.11	6.76	7.6	0.02	0.02	592.2
27-Mar-19	13-May-19	8.07	1680	956	0.03	5.75	6.6	0.02	< 0.01	591.0
25-Sep-19	12-Nov-19	7.32	1830	982	0.05	4.45	6.3	0.03	0.01	590.3
22-Apr-20	1-May-20	7.7	1500	1000	0.012	3.4	3.5	0.06	0.044	589.1
2-Sep-20	11-Sep-20	7.5	1500	1000	0.088	2.9	3.2	0.1	0.077	589.1
30-Mar-21	31-Mar-21	7.4	1300	950	0.019	2.9	3.3	0.1	0.05	589.2
5-Aug-21	16-Aug-21	7.8	1300	1600	0.1	2.6	3.2	0.08	0.067	589.2
24-Feb-22	4-Mar-22	7.3	1600	1200	<0.005	5.1	6.1	<0.05	0.03	591.2
19-Aug-22	19-Aug-22	8.2	1600	1000	0.24	4.2	5.6	0.07	0.05	-
31-May-23	01-Jun-23	7.5	2100	1300	<0.005	5.2	2.1	0.09	0.057	592.3
06-Nov-23	07-Nov-23	7.3	2100	1400	0.018	5.4	8.2	0.1	0.09	591.0
27-Nov-24	16-Dec-24	7.4	1900	1300	0.18	4.1	4.8	0.2	0.058	591.2
12-May-25	21-May-25	7.4	1700	1200	1	5	5.9	0.53	0.5	590.9
20-Oct-25	31-Oct-25	7.8	3000	1300	0.45	6.4	6.7	0.1	0.11	591.9

Point 19 (Average of stormwater collection points below cattleyards)

Sampling Frequency (eachoverflow event)

Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Kjeldahl Nitrogen (mg/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)

Point 20 (Blue metal filter below first flush collection pit for sheep pens)

Sampling Frequency (eachoverflow event)

Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Kjeldahl Nitrogen (mg/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)
1/28/2015	2/25/2015	7.5	388	215	0.61	4.41	6.7	11.5	9.69	9.61

Point 21 (Groundwater)

Sampling Frequency		Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually	Biannually
Date Sampled	Date Obtained	pH (pH units)	Electrical Conductivity (µS/cm)	Total Dissolved Solids (mg/L)	Ammonia (mgN/L)	Nitrate as N (mgN/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Reactive Phosphorus (mgP/L)	Standing Water Level (measured)
20-Sep-12	7-Dec-13	8.01	1120	714	0.04	0.08	<0.1	0.1	0.02	591.2
16-Jan-13	30-Mar-13	7.82	1080	636	0.02	0.33	0.9	0.17	0.02	590.9
8-Jul-13	6-Sep-13	7.89	1090	602	<0.01	0.24	0.15	0.03	0.03	590.5
29-Jan-14	21-Feb-14	7.9	1120	641	0.14	0.08	0.5	0.12	0.03	588.5
16-Jul-14	Blocked									587.9
28-Jan-15	25-Feb-15	7.93	1050	570	0.1	0.03	1.6	0.31	<0.01	587.3
14-Jul-15	7-Aug-15	7.71	1030	542	0.06	0.06	1.6	0.28	0.03	587.4
26-Jan-16	14-Mar-16									NMWL
22-Jun-16	26-Sep-16									NMWL
2-Feb-17	17-Feb-17	7.59	1090	730	0.03	0.14	11.8	1.58	0.15	589.0
2-Aug-17	19-Sep-18	7.95	984	506	0.08	< 0.01	0.2	< 0.01	0.02	591.4
31-Jan-18	9-Feb-18	7.92	1010	660	0.51	0.03	0.5	0.05	0.02	591.0
1-Aug-18	30-Aug-18	7.97	1010	510	0.08	< 0.01	< 0.1	0.03	0.02	590.5
27-Mar-19	13-May-19	8.12	981	603	0.02	0.15	0.2	0.01	< 0.01	589.6
25-Sep-19	DRY									NMWL
22-Apr-20	1-May-20	7.7	1500	930	0.014	3.4	3.4	0.07	0.044	587.6
2-Sep-20	11-Sep-20	7.5	1500	1200	0.075	3	3.3	0.1	0.077	587.6
30-Mar-21	31-Mar-21	7.4	1300	890	0.024	2.9	3.3	0.1	0.05	587.8

5-Aug-21	16-Aug-21	7.8	1300	820	0.092	2.6	3.2	0.1	0.068	588.0
24-Feb-22	4-Mar-22	7.3	1600	1200	0.006	5.1	6	<0.05	0.03	590.5
19-Aug-22	19-Aug-22	8.2	1600	970	0.21	4.2	5.7	0.08	0.053	-
31-May-23	01-Jun-23	7.5	2100	1300	<0.005	5.2	5.7	0.09	0.057	-
06-Nov-23	14-Nov-23	-	-	-	-	-	-	-	-	-
17-Jun-24	26-Jun-24	-	-	-	-	-	-	-	-	-
27-Nov-24	16-Dec-24	7.4	1700	1200	1	5	5.9	0.53	0.5	-
12-May-25	21-May-25	7.4	1100	930	0.04	2.6	2.9	3.6	0.094	590.0
20-Oct-25	31-Oct-25	7.5	910	610	0.04	2.3	2.8	0.96	0.006	590.9

Point 22 (Soils -average of topsoil and subsoil from two management units)

Sampling Frequency		Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	3 Yearly	3 Yearly	3 Yearly	3 Yearly	3 Yearly	3 Yearly
Date Sampled	Date Obtained	pH (pH units)	Sodium Adsorption Ratio	Electrical Conductivity (µS/cm)	Exchangeable Calcium (mg/kg)	Exchangeable Magnesium (mg/kg)	Exchangeable Sodium (mg/kg)	Exchangeable Potassium (mg/kg)	Cation Exchange Capacity (cmol/kg)	Chloride (mg/kg)	Nitrate (mgN/kg)	Available Phosphorus (mgP/Kg)	Organic Carbon (%)	Aggregate Stability (%)	Bulk Density (g/cm3)	Saturated Hydraulic Conductivity (mm/hr)	Total Nitrogen (mg/kg)	Total Phosphorus (mg/kg)	Phosphorus Sorption Capacity (mg/kg)	
18-Aug-22	8/18/2022	7.455	1.6	195	10308	2928	483	2421.5	84.25	66.45	2.345	197.85	2.475	9.785	1	0.055	2775	544	933.5	
31-May-23	5/31/2023	7.3	1.8	235	6652.5	2605	350	2550	63.05	48.2	33.2	174.2	1.965	-	-	-	-	-	-	
17-Jun-24	26-Jun-24	6.86	0.4	100	7556	2382	203	2702	65.5	22.2	3.65	271	2.44							
12-May-25	21-May-25	7.305	0.65	155	7850.5	2347	382.5	2245	66.2	27.4	15.99	75.65	1.83	48.85	1.05	0.405	3615.5	447	652	

Point 23 (Soils -average of topsoil and subsoil from two management units)

Sampling Frequency		Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly	3 Yearly	3 Yearly	3 Yearly	3 Yearly	3 Yearly	3 Yearly
Date Sampled	Date Obtained	pH (pH units)	Sodium Adsorption Ratio	Electrical Conductivity (µS/cm)	Exchangeable Calcium (mg/kg)	Exchangeable Magnesium (mg/kg)	Exchangeable Sodium (mg/kg)	Exchangeable Potassium (mg/kg)	Cation Exchange Capacity (cmol/kg)	Chloride (mg/kg)	Nitrate (mgN/kg)	Available Phosphorus (mgP/L)	Organic Carbon (%)	Aggregate Stability (%)	Bulk Density (g/cm3)	Saturated Hydraulic Conductivity (mm/hr)	Total Nitrogen (mg/kg)	Total Phosphorus (mg/kg)	Phosphorus Sorption Capacity (mg/kg)	
18-Aug-22	8/18/2022	6.815	0.5	45	10809.5	3415	188.5	379	84.3	15.2	1.805	19.8	1.525	27.45	1.05	0.035	1127.5	249	701	
31-May-23	5/31/2023	6.43	0.65	65	7229.5	2389	79.52	194.5	56.9	20	4.82	22.65	1.62	-	-	-	-	-	-	
17-Jun-24	26-Jun-24	6.95	0.5	70	8242	2469	321	683	70	29.4	6.77	200	1.79							
12-May-25	21-May-25	7	0.35	70	8127	2635.5	192.5	342	64.3	23.3	2.38	10.08	1.41	71.2	1.1	0.225	2853.5	276.5	583	