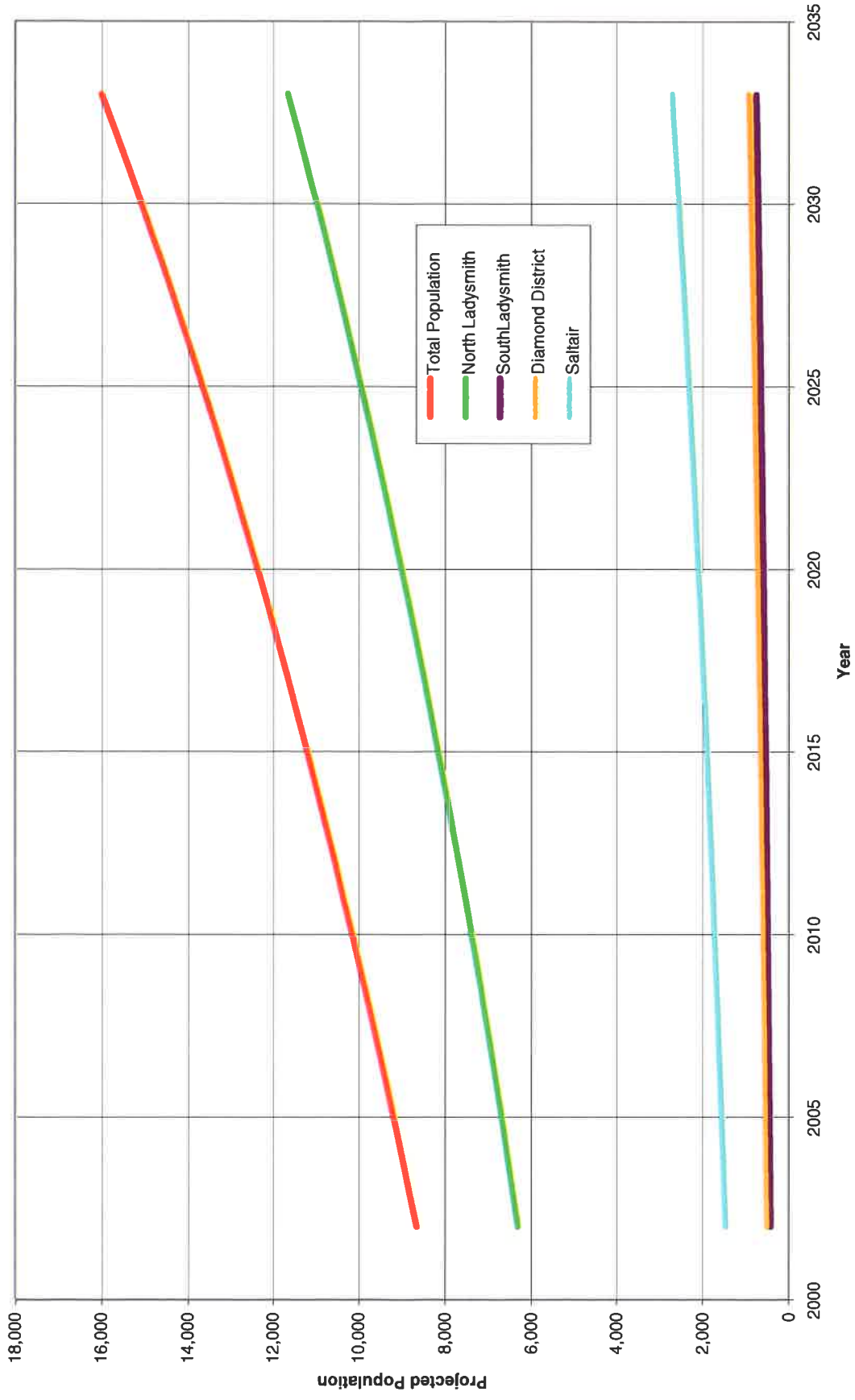


APPENDIX "A"

Calculations of Population & Demand Projections
for the Town of Ladysmith and Saltair Service Area

Town of Ladysmith Population Projections 2002- 2032



Town of Ladysmith
Population Projections

Projected Growth Rates

North Ladysmith	2%
South Ladysmith	0.5% Limited area for residential growth
Saltair	2%
Diamond District	2%

Year	North Ladysmith	South Ladysmith	Total Ladysmith	Diamond D.	Saltair	Total
2002	6,300	400	6,700	500	1,452	8,652
2003	6,426	408	6,834	510	1,481	8,825
2004	6,555	416	6,971	520	1,511	9,001
2005	6,686	424	7,110	531	1,541	9,181
2006	6,819	433	7,252	541	1,572	9,365
2007	6,956	442	7,397	552	1,603	9,552
2008	7,095	450	7,545	563	1,635	9,743
2009	7,237	459	7,696	574	1,668	9,938
2010	7,381	469	7,850	586	1,701	10,137
2011	7,529	478	8,007	598	1,735	10,340
2012	7,680	488	8,167	609	1,770	10,547
2013	7,833	497	8,331	622	1,805	10,757
2014	7,990	507	8,497	634	1,841	10,973
2015	8,150	517	8,667	647	1,878	11,192
2016	8,313	528	8,841	660	1,916	11,416
2017	8,479	538	9,017	673	1,954	11,644
2018	8,649	549	9,198	686	1,993	11,877
2019	8,822	560	9,382	700	2,033	12,115
2020	8,998	571	9,569	714	2,074	12,357
2021	9,178	583	9,761	728	2,115	12,604
2022	9,361	594	9,956	743	2,157	12,856

Town of Ladysmith

Industrial and Commercial Demand Projections

Present day total industrial demand is estimated at:	15%	of total demand
Total Commercial Demand over the last year	260	ML
Projected Average Day Commercial Demand (2002)	0.71	ML/d

Assume Present Day I/C Demand is split in proportion with residential population

Projected I/C Demand Growth Rates

North Ladysmith	1% Limited space for future growth
South Ladysmith	4% Heavy industrial growth is projected
Saltair	4% Heavy industrial growth is projected
Diamond District	1%

Town of Ladymith
Demand Projections

Per Capita Demand 533 lpcd without metering 4.61152
Assume 20% reduction with metering program 0.71
426 lpcd with metering 5.32152
615.062

Peak Day to Average Day Peaking Factor 2.1

Peak Hour to Peak Day Peaking Factor 2.0

Year	AVERAGE DAY DEMAND (M/G)														PEAK DAY DEMAND (M/G)														PEAK HOUR DEMAND (M/G)																
	Residential Demand				Industrial & Commercial Demand				Total Demand						Residential Demand				Industrial & Commercial Demand				Total Demand						Residential Demand				Industrial & Commercial Demand				Total Demand								
	North	South	Saltsir	Diamond	Overall	North	South	Saltsir	Diamond	Overall	North	South	Saltsir	Diamond	Overall	North	South	Saltsir	Diamond	Overall	North	South	Saltsir	Diamond	Overall	North	South	Saltsir	Diamond	Overall	North	South	Saltsir	Diamond	Overall	North	South	Saltsir	Diamond	Overall	North	South	Saltsir	Diamond	Overall
2002	2.69	0.17	0.62	0.21	3.69	0.40	0.03	0.09	0.03	0.55	3.09	0.20	0.71	0.25	4.24	5.64	0.36	1.30	0.45	7.73	0.85	0.05	0.20	0.07	1.16	6.49	0.41	1.50	0.61	8.91	11.3	0.7	2.6	0.9	15.5	1.7	0.1	0.4	0.1	2.3	13.0	0.8	3.0	1.0	17.8
2003	2.74	0.17	0.63	0.22	3.76	0.40	0.03	0.10	0.03	0.56	3.15	0.20	0.73	0.25	4.32	5.75	0.37	1.33	0.46	7.90	0.85	0.06	0.20	0.07	1.18	6.60	0.42	1.53	0.52	9.08	11.5	0.7	2.7	0.9	15.8	1.7	0.1	0.4	0.1	2.4	13.2	0.8	3.1	1.0	18.2
2004	2.79	0.18	0.64	0.22	3.84	0.41	0.03	0.10	0.03	0.57	3.20	0.21	0.74	0.25	4.41	5.87	0.37	1.35	0.47	8.06	0.85	0.06	0.21	0.07	1.19	6.72	0.43	1.56	0.53	9.25	11.7	0.7	2.7	0.9	16.1	1.7	0.1	0.4	0.1	2.4	13.4	0.9	3.1	1.1	18.5
2005	2.85	0.18	0.66	0.23	3.91	0.41	0.03	0.10	0.03	0.58	3.26	0.21	0.76	0.26	4.49	5.99	0.38	1.38	0.48	8.22	0.86	0.06	0.22	0.07	1.21	6.85	0.44	1.60	0.54	9.43	12.0	0.8	2.8	1.0	16.4	1.7	0.1	0.4	0.1	2.4	13.7	0.9	3.2	1.1	19.9
2006	2.91	0.18	0.67	0.23	3.99	0.41	0.03	0.11	0.03	0.58	3.32	0.21	0.78	0.26	4.58	6.11	0.39	1.41	0.48	8.39	0.86	0.06	0.23	0.07	1.22	6.97	0.45	1.64	0.55	9.61	12.2	0.8	2.8	1.0	16.8	1.7	0.1	0.5	0.1	2.4	13.9	0.9	3.3	1.1	19.6
2007	2.97	0.19	0.68	0.24	4.07	0.41	0.03	0.11	0.03	0.59	3.38	0.22	0.80	0.27	4.66	6.23	0.40	1.44	0.49	8.55	0.87	0.07	0.24	0.07	1.24	7.10	0.46	1.67	0.56	9.79	12.5	0.8	2.9	1.0	17.1	1.7	0.1	0.5	0.1	2.5	14.2	0.9	3.3	1.1	19.6
2008	3.03	0.19	0.70	0.24	4.15	0.42	0.03	0.12	0.03	0.60	3.44	0.22	0.81	0.27	4.75	6.35	0.40	1.46	0.50	8.72	0.87	0.07	0.25	0.07	1.24	7.22	0.47	1.71	0.58	9.98	12.7	0.8	2.9	1.0	17.4	1.7	0.1	0.5	0.1	2.5	14.4	0.9	3.4	1.2	20.0
2009	3.09	0.20	0.71	0.24	4.24	0.42	0.03	0.12	0.03	0.61	3.50	0.23	0.83	0.28	4.85	6.48	0.41	1.49	0.51	8.90	0.88	0.07	0.26	0.07	1.28	7.36	0.48	1.75	0.59	10.17	13.0	0.8	3.0	1.0	17.8	1.8	0.1	0.5	0.1	2.6	15.0	1.0	3.6	1.2	20.7
2010	3.15	0.20	0.73	0.25	4.32	0.42	0.04	0.13	0.03	0.62	3.57	0.23	0.85	0.28	4.94	6.61	0.42	1.52	0.52	9.08	0.88	0.07	0.27	0.07	1.29	7.49	0.49	1.79	0.60	10.37	13.2	0.8	3.0	1.0	18.2	1.8	0.1	0.5	0.1	2.6	15.3	1.0	3.7	1.2	21.1
2011	3.21	0.20	0.74	0.25	4.41	0.42	0.04	0.13	0.03	0.63	3.63	0.24	0.87	0.29	5.03	6.74	0.43	1.55	0.54	9.26	0.89	0.08	0.28	0.07	1.31	7.63	0.50	1.83	0.61	10.57	13.5	0.9	3.1	1.1	18.5	1.8	0.2	0.6	0.1	2.6	15.3	1.0	3.7	1.2	21.1
2012	3.27	0.21	0.75	0.26	4.50	0.42	0.04	0.14	0.04	0.63	3.70	0.25	0.89	0.30	5.13	6.88	0.44	1.58	0.55	9.44	0.89	0.08	0.29	0.07	1.33	7.77	0.52	1.92	0.63	10.98	14.0	0.9	3.2	1.1	19.3	1.8	0.2	0.6	0.1	2.7	15.8	1.1	3.8	1.3	22.0
2013	3.34	0.21	0.77	0.27	4.59	0.43	0.04	0.14	0.04	0.64	3.77	0.25	0.91	0.30	5.23	7.01	0.45	1.62	0.56	9.63	0.89	0.08	0.30	0.07	1.35	7.91	0.53	1.92	0.63	10.98	14.0	0.9	3.2	1.1	19.3	1.8	0.2	0.6	0.1	2.7	15.8	1.1	3.8	1.3	22.0
2014	3.41	0.22	0.79	0.27	4.68	0.43	0.04	0.15	0.04	0.65	3.83	0.26	0.93	0.31	5.33	7.15	0.45	1.65	0.57	9.83	0.90	0.09	0.31	0.08	1.37	8.05	0.54	1.96	0.64	11.20	14.3	0.9	3.3	1.1	19.7	1.8	0.2	0.6	0.2	2.7	16.1	1.1	3.9	1.3	22.4
2015	3.48	0.22	0.80	0.28	4.77	0.43	0.04	0.15	0.04	0.66	3.90	0.26	0.96	0.31	5.44	7.30	0.46	1.68	0.58	10.02	0.90	0.09	0.32	0.08	1.39	8.20	0.55	2.01	0.65	11.42	14.6	0.9	3.4	1.2	20.4	1.8	0.2	0.7	0.2	2.8	16.7	1.1	4.1	1.3	23.3
2016	3.54	0.23	0.82	0.28	4.87	0.43	0.04	0.16	0.04	0.67	3.98	0.27	0.98	0.32	5.54	7.44	0.47	1.72	0.59	10.22	0.91	0.09	0.34	0.08	1.42	8.35	0.57	2.05	0.67	11.64	14.9	0.9	3.4	1.2	20.4	1.8	0.2	0.7	0.2	2.8	16.7	1.1	4.1	1.3	23.3
2017	3.62	0.23	0.83	0.29	4.97	0.43	0.05	0.17	0.04	0.68	4.05	0.28	1.00	0.32	5.65	7.59	0.48	1.75	0.60	10.43	0.91	0.10	0.35	0.08	1.44	8.50	0.58	2.10	0.68	11.86	15.2	1.0	3.5	1.2	20.9	1.8	0.2	0.7	0.2	2.9	17.0	1.2	4.2	1.4	23.7
2018	3.69	0.23	0.85	0.29	5.06	0.44	0.05	0.17	0.04	0.70	4.12	0.28	1.02	0.33	5.76	7.74	0.49	1.78	0.61	10.64	0.92	0.10	0.37	0.08	1.46	8.66	0.59	2.15	0.69	12.10	15.5	1.0	3.6	1.2	21.3	1.8	0.2	0.7	0.2	2.9	17.3	1.2	4.3	1.4	24.2
2019	3.76	0.24	0.87	0.30	5.17	0.44	0.05	0.18	0.04	0.71	4.20	0.29	1.05	0.34	5.87	7.90	0.50	1.82	0.63	10.85	0.92	0.10	0.38	0.08	1.49	8.82	0.61	2.20	0.71	12.33	15.8	1.0	3.6	1.3	21.7	1.8	0.2	0.8	0.2	3.0	17.6	1.2	4.4	1.4	24.7
2020	3.84	0.24	0.88	0.30	5.27	0.44	0.05	0.19	0.04	0.72	4.28	0.30	1.07	0.34	5.99	8.05	0.51	1.86	0.64	11.06	0.93	0.11	0.40	0.08	1.51	8.98	0.62	2.25	0.72	12.57	16.1	1.0	3.7	1.3	22.1	1.9	0.2	0.8	0.2	3.0	18.0	1.2	4.5	1.4	25.1
2021	3.91	0.25	0.90	0.31	5.37	0.44	0.05	0.20	0.04	0.73	4.36	0.30	1.10	0.35	6.11	8.22	0.52	1.89	0.65	11.29	0.93	0.11	0.41	0.08	1.54	9.13	0.63	2.30	0.73	12.82	16.4	1.0	3.8	1.3	22.6	1.9	0.2	0.8	0.2	3.1	18.3	1.3	4.6	1.5	25.6
2022	3.99	0.25	0.92	0.32	5.48	0.45	0.06	0.20	0.04	0.74	4.44	0.31	1.12	0.36	6.23	8.38	0.53	1.93	0.67	11.51	0.93	0.12	0.43	0.08	1.56	9.32	0.65	2.36	0.75	13.07	16.77	1.06	3.86	1.33	23.02	1.87	0.24	0.85	0.16	3.12	18.64	1.30	4.72	1.49	26.15
2023	4.07	0.26	0.94	0.32	5.59	0.45	0.06	0.21	0.04	0.75	4.52	0.32	1.15	0.36	6.35	8.55	0.54	1.97	0.68	11.74	0.94	0.12	0.44	0.08	1.59	9.49	0.67	2.41	0.76	13.33	17.1	1.1	3.9	1.4	23.5	1.9	0.2	0.9	0.2	3.2	19.0	1.3	4.8	1.5	26.7
2024	4.15	0.26	0.96	0.33	5.70	0.45	0.06	0.22	0.04	0.77	4.60	0.32	1.18	0.37	6.47	8.72	0.55	2.01	0.69	11.96	0.94	0.13	0.46	0.08	1.62	9.67	0.68	2.47	0.78	13.59	17.4	1.1	4.0	1.4	24.0	1.9	0.3	0.9	0.2	3.2	19.3	1.4	4.9	1.6	27.2
2025	4.24	0.27	0.98	0.34	5.82	0.45	0.06	0.23	0.04	0.78	4.69	0.33	1.21	0.38	6.60	8.90	0.56	2.05	0.71	12.22	0.95	0.13	0.48	0.08	1.65	9.84	0.70	2.53	0.79	13.86	17.8	1.1	4.1	1.4	24.4	1.9	0.3	1.0	0.2	3.3	19.7	1.4	5.1	1.6	27.7
2026	4.32	0.27	1.00	0.34	5.93	0.45	0.07	0.24	0.04	0.80	4.77	0.34	1.23	0.38	6.73	9.07	0.58	2.09	0.72	12.45	0.95	0.14	0.50	0.09	1.68	10.03	0.71	2.59	0.81	14.14	18.1	1.2	4.2	1.4	24.9	1.9	0.3	1.0	0.2	3.4	20.1	1.4	5.2	1.6	28.3
2027	4.41	0.28	1.02	0.35	6.05	0.46	0.07	0.25	0.04	0.81	4.86	0.35	1.26	0.39	6.87	9.26	0.59	2.13	0.73	12.71	0.96	0.14	0.52	0.09	1.71	10.21	0.73	2.65	0.82	14.42	18.5	1.2	4.3	1.5	25.4	1.9	0.3	1.0	0.2	3.4	20.4	1.5	5.3	1.6	28.8
2028	4.50	0.29	1.04	0.36	6.17	0.46	0.07	0.26	0.04	0.83	4.95	0.36	1.29	0.40	7.00	9.44	0.60	2.18	0.75	12.96	0.96	0.15	0.54	0.09	1.74	10.40	0.75	2.72	0.84	14.70	18.9	1.2	4.4	1.5	25.9	1.9	0.3	1.1	0.2	3.5	20.8	1.5	5.4	1.7	29.4
2029	4.59	0.29	1.06	0.36	6.30	0.46	0.07	0.27	0.04	0.84	5.05	0.36	1.32	0.41	7.14	9.63	0.61	2.22	0.76	13.22	0.97	0.15	0.56	0.09	1.77	10.60	0.77	2.78	0.85	15.00	19.3	1.2	4.4	1.5	26.4	1.9	0.3	1.1	0.2	3.5	21.2	1.5	5.6	1.7	30.0
2030	4.68	0.30	1.08																																										