

Demands from Community and Domestic Consumers (Base Year 2001)				to Projected Year 2051 using Statistics New Zealand National Population Projections																		
Notes	Township	Population	Calculated Current Demand		Low Growth Projection				Medium Growth Projection				High Growth Projection									
			Base 2001	Peak Flow (l/s)	Annual Demand (m3/yr)	Peak Flow (l/s) 2011	Volume (m3/yr)	Peak Flow (l/s) 2021	Volume (m3/yr)	Peak Flow (l/s) 2051.00	Volume (m3/yr)	Peak Flow (l/s) 2011.00	Volume (m3/yr)	Peak Flow (l/s) 2021.00	Volume (m3/yr)	Peak Flow (l/s) 2051.00	Volume (m3/yr)					
Waitaki catchment																						
Census	Mt Cook	234	17.04	295472	18.48	320,602	19.30	334,767	19.34	335,376	18.65	323,496	19.78	343,144	21.11	366,066	19.21	333,244	21.17	367,132	25.40	440,619
Census	Tekapo	303	22.06	382599	23.93	415,139	24.99	433,480	25.04	434,269	24.15	418,886	25.62	444,327	27.33	474,008	24.88	431,508	27.41	475,389	32.89	570,545
Census	Pukaki	14	1.02	13161	1.11	14,281	1.16	14,912	1.16	14,939	1.12	14,410	1.19	15,285	1.27	16,306	1.16	14,844	1.27	16,353	1.53	19,627
Census	Twizel	1011	73.97	950429	80.27	1,031,265	83.81	1,076,826	83.97	1,078,786	80.99	1,040,573	85.91	1,103,772	91.65	1,177,503	83.43	1,071,927	91.92	1,180,933	110.31	1,417,315
Census	Lake Ohau	50	3.66	47004	3.97	51,002	4.15	53,256	4.15	53,352	4.01	51,463	4.25	54,588	4.53	58,235	4.13	53,013	4.55	58,404	5.46	70,095
Census	Omarama	279	20.41	262285	22.15	284,592	23.13	297,166	23.17	297,707	22.35	287,161	23.71	304,602	25.29	324,949	23.02	295,814	25.37	325,895	30.44	391,129
Census	Otematata	243	17.78	228441	19.29	247,871	20.14	258,822	20.18	259,293	19.47	250,108	20.65	265,298	22.03	283,020	20.05	257,644	22.09	283,844	26.51	340,660
Census	Aviemore	270	19.76	253824	21.44	275,412	22.38	287,580	22.42	288,103	21.63	277,898	22.94	294,776	24.48	314,467	22.28	286,271	24.55	315,383	29.46	378,511
Census	Lake Waitaki	270	19.76	253824	21.44	275,412	22.38	287,580	22.42	288,103	21.63	277,898	22.94	294,776	24.48	314,467	22.28	286,271	24.55	315,383	29.46	378,511
Census	Kurow	387	28.32	363814	30.73	394,757	32.08	412,198	32.14	412,948	31.00	398,320	32.89	422,512	35.08	450,736	31.94	410,322	35.18	452,048	42.23	542,533
Census	Duntroon	120	6.00	83255	6.51	90,336	6.80	94,327	6.81	94,499	6.57	91,151	6.97	96,687	7.43	103,146	6.77	93,898	7.46	103,447	8.95	124,153
Estimate	Glenavy	50	2.50	34690	2.71	37,640	2.83	39,303	2.84	39,374	2.74	37,980	2.90	40,286	3.10	42,978	2.82	39,124	3.11	43,103	3.73	51,730
Estimate	Lower Waitaki	50	2.50	34690	2.71	37,640	2.83	39,303	2.84	39,374	2.74	37,980	2.90	40,286	3.10	42,978	2.82	39,124	3.11	43,103	3.73	51,730
Census	Pukeuri	183	9.15	126964	9.93	137,762	10.37	143,849	10.39	144,111	10.02	139,006	10.63	147,448	11.34	157,298	10.32	143,194	11.37	157,756	13.64	189,333
derived from LINZ	Mackenzie Distric	195	9.75	135289	10.58	146,796	11.05	153,282	11.07	153,560	10.67	148,121	11.32	157,117	12.08	167,612	11.00	152,584	12.11	168,101	14.54	201,749
derived from LINZ	Waitaki District	870	43.50	603599	47.20	654,936	49.29	683,871	49.37	685,116	47.63	660,848	50.52	700,984	53.89	747,809	49.06	680,760	54.05	749,987	64.87	900,109
derived from LINZ	Waimate District	454	11.35	157491	12.32	170,886	12.86	178,435	12.88	178,760	12.43	172,428	13.18	182,900	14.06	195,118	12.80	177,624	14.10	195,686	16.93	234,856
	<b>Sum:</b>	<b>4983</b>	<b>308.52</b>	<b>4226831</b>	<b>334.77</b>	<b>4,586,329</b>	<b>349.56</b>	<b>4,788,956</b>	<b>350.19</b>	<b>4,797,671</b>	<b>337.79</b>	<b>4,627,726</b>	<b>358.30</b>	<b>4,908,788</b>	<b>382.24</b>	<b>5,236,695</b>	<b>347.96</b>	<b>4,767,168</b>	<b>383.35</b>	<b>5,251,946</b>	<b>460.08</b>	<b>6,303,207</b>
North of Catchment																						
TDC AMP (50%)	Pleasant Point	610	12.20	211607	13.24	229,604	13.82	239,748	13.85	240,184	13.36	231,676	14.17	245,747	15.11	262,163	13.76	238,657	15.16	262,927	18.19	315,556
TDC AMP (50%)	Temuka	2000	35.00	693792	37.98	752,800	39.65	786,059	39.73	787,490	38.32	759,595	40.65	805,729	43.36	859,551	39.47	782,483	43.49	862,054	52.19	1,034,608
TDC AMP (50%)	Geraldine	1150	23.00	398930	24.96	432,860	26.06	451,984	26.11	452,807	25.18	436,767	26.71	463,294	28.50	494,242	25.94	449,928	28.58	495,681	34.30	594,900
WDC Dwelling data	Waikakahi	295	5.90	102334	6.40	111,038	6.68	115,944	6.70	116,155	6.46	112,040	6.85	118,845	7.31	126,784	6.65	115,416	7.33	127,153	8.80	152,605
WDC Dwelling data	Lower Waihao	422	8.44	146390	9.16	158,841	9.56	165,858	9.58	166,160	9.24	160,275	9.80	170,009	10.46	181,365	9.52	165,104	10.49	181,893	12.59	218,302
unknown	Timaru District		0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
	<b>Sum:</b>	<b>4477</b>	<b>84.54</b>	<b>1553053</b>	<b>91.73</b>	<b>1,685,143</b>	<b>95.78</b>	<b>1,759,593</b>	<b>95.96</b>	<b>1,762,796</b>	<b>92.56</b>	<b>1,700,353</b>	<b>98.18</b>	<b>1,803,623</b>	<b>104.74</b>	<b>1,924,105</b>	<b>95.35</b>	<b>1,751,588</b>	<b>105.04</b>	<b>1,929,709</b>	<b>126.07</b>	<b>2,315,971</b>
South of Catchment																						
Census (100%)	Weston	708	14.16	245602	15.36	266,491	16.04	278,265	16.07	278,771	15.50	268,897	16.44	285,228	17.54	304,281	15.97	276,999	17.59	305,167	21.12	366,251
Census (100%)	Oamaru	11085	221.70	3845342	240.56	4,172,394	251.18	4,356,733	251.64	4,364,662	242.73	4,210,055	257.47	4,465,750	274.67	4,764,062	250.04	4,336,912	275.47	4,777,937	330.61	5,734,317
Census (100%)	Kakanui	411	8.22	142574	8.92	154,700	9.31	161,535	9.33	161,829	9.00	156,097	9.55	165,577	10.18	176,638	9.27	160,800	10.21	177,152	12.26	212,612
Census (100%)	Hampden	303	6.06	105109	6.58	114,049	6.87	119,088	6.88	119,305	6.63	115,079	7.04	122,068	7.51	130,222	6.83	118,546	7.53	130,601	9.04	156,743
Census (100%)	Palmerston	810	16.20	280986	17.58	304,884	18.35	318,354	18.39	318,933	17.74	307,636	18.81	326,320	20.07	348,118	18.27	316,906	20.13	349,132	24.16	419,016
Estimate (50%)	Waitaki District	1787	35.74	619903	38.78	672,627	40.49	702,344	40.57	703,622	39.13	678,698	41.51	719,918	44.28	768,009	40.31	699,149	44.41	770,246	53.30	924,423
	<b>Sum:</b>	<b>15104</b>	<b>302.08</b>	<b>5239517</b>	<b>327.77</b>	<b>5,685,146</b>	<b>342.25</b>	<b>5,936,319</b>	<b>342.88</b>	<b>5,947,122</b>	<b>330.73</b>	<b>5,736,461</b>	<b>350.82</b>	<b>6,084,862</b>	<b>374.25</b>	<b>6,491,330</b>	<b>340.70</b>	<b>5,909,311</b>	<b>375.34</b>	<b>6,510,235</b>	<b>450.47</b>	<b>7,813,362</b>
Extreme South of Catchment																						
DCC AMP (100%)	Waikouaiti	1098	21.96	380892	23.83	413,287	24.88	431,546	24.93	432,332	24.04	417,018	25.50	442,345	27.21	471,894	24.77	429,583	27.29	473,268	32.75	568,000
DCC AMP (100%)	Karitane	399	7.98	138412	8.66	150,184	9.04	156,819	9.06	157,104	8.74	151,539	9.27	160,743	9.89	171,480	9.00	156,105	9.92	171,980	11.90	206,404
DCC AMP (100%)	Warrington	396	7.92	137371	8.59	149,054	8.97	155,640	8.99	155,923	8.67	150,400	9.20	159,534	9.81	170,191	8.93	154,932	9.84	170,687	11.81	204,852
DCC AMP (100%)	Waitati	495	9.90	171714	10.74	186,318	11.22	194,550	11.24	194,904	10.84	188,000	11.50	199,418	12.27	212,739	11.17	193,665	12.30	213,358	14.76	256,066
Estimate (30%)	Dunedin City Dis	356	7.12	123495	7.73	133,998	8.07	139,919	8.08	140,173	7.80	135,208	8.27	143,420	8.82	153,000	8.03	139,282	8.85	153,446	10.62	184,160
	<b>Sum:</b>	<b>2744</b>	<b>54.88</b>	<b>951883</b>	<b>59.55</b>	<b>1,032,842</b>	<b>62.18</b>	<b>1,078,473</b>	<b>62.29</b>	<b>1,080,436</b>	<b>60.09</b>	<b>1,042,164</b>	<b>63.73</b>	<b>1,105,460</b>	<b>67.99</b>	<b>1,179,304</b>	<b>61.90</b>	<b>1,073,567</b>	<b>68.19</b>	<b>1,182,739</b>	<b>81.84</b>	<b>1,419,483</b>
	<b>Current Demand:</b>	<b>16,785</b>	<b>544.56</b>	<b>8,320,897</b>																		
	<b>Projected Demand:</b>				<b>813.82</b>	<b>12,989,460</b>	<b>849.77</b>	<b>13,563,341</b>	<b>851.32</b>	<b>13,588,024</b>	<b>821.16</b>	<b>13,106,705</b>	<b>871.03</b>	<b>13,902,733</b>	<b>929.22</b>	<b>14,831,433</b>	<b>845.90</b>	<b>13,501,634</b>	<b>931.92</b>	<b>14,874,629</b>	<b>1118.46</b>	<b>17,852,023</b>
Highlighted rows indicate Out of Catchment demands that currently take water from the Waitaki (Waikakahi, Lower Waihao and Oamaru), all other Out of Catchment demands are assumed to create new takes in the future																						