

JAPAN INTERNATIONAL COOPERATION AGENCY
NATIONAL WATER SUPPLY AND DRAINAGE BOARD
THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

THE FEASIBILITY STUDY
ON
THE KALU GANGA WATER SUPPLY PROJECT
FOR
GREATER COLOMBO
VOLUME III
SUPPORTING REPORT

NOVEMBER 1994

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**THE FEASIBILITY STUDY
ON THE KALU GANGA WATER SUPPLY PROJECT
FOR GREATER COLOMBO**

VOLUME III

SUPPORTING REPORT

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CHAPTER 4

Ref. No. 4.1

Subject : Water Demand Projection

Title : Water Demand Projection by Administrative Area

Contents : Full Development Water Demand Projection

Projected Full Development Water Demand (Revised Projection)

TOTAL OF EXISTING AND NEW SERVICE AREA DEMANDS

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	3,178,450	3,423,800	3,644,775	3,865,750	4,088,275	4,310,800
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	35,605	37,868	39,724	41,580	43,069	44,558
Ave. Net Population Density (pop./ha)	89	90	92	93	95	97
B. Total Service Population (A*B/100)	1,585,907	1,768,894	1,797,291	1,825,687	1,846,202	1,866,716
C. Average Service Ratio (% to Total Pop.)	50	52	49	47	45	43
D. Direct Connection						
Total Population	1,670,479	1,947,304	2,135,446	2,329,181	2,527,205	2,730,571
Water Use (m3/d)	233,830	296,023	339,897	387,408	440,651	498,127
E. Community Tap						
Total Population	590,270	524,365	406,240	279,686	144,278	0
Water Use (m3/d)	31,284	27,791	21,531	14,823	7,647	0
F. Yard Tap						
Total Population	440,681	587,914	728,054	877,502	1,038,005	1,208,814
Water Use (m3/d)	33,051	44,094	54,604	65,813	77,850	90,661
H. Total Domestic Water Use (D+E+F)						
Total Connected Population	2,701,430	3,059,583	3,269,740	3,486,369	3,709,488	3,939,385
Total Domestic Water Use (m3/d)	298,165	367,908	416,032	468,044	526,148	588,788
I. Industrial Water Use						
Total Industrial Area (ha)	2,884	3,492	4,020	4,549	4,973	5,398
Industrial Water Use (m3/d)	25,795	30,972	35,482	39,992	43,473	46,955
J. Commercial Water Use						
Total Commercial Area (ha)	1,552	1,684	1,794	1,905	1,995	2,086
Commercial Water Use (m3/d)	99,737	110,743	120,371	130,197	135,838	141,480
K. Institutional Water Use						
Total Institutional Area (ha)	2,274	2,446	2,563	2,681	2,784	2,887
Institutional Water Use (m3/d)	70,949	77,881	82,546	87,255	90,097	92,939
L. Total Net Water Use (m3/d) (H+I+J+K)	494,645	587,504	654,431	725,487	795,556	870,162
M. Water Loss						
Water Loss (m3/d)	171,900	174,545	199,974	229,021	238,993	252,313
N. Total Water Demand (m3/d) (L+M)	666,546	762,049	854,405	954,509	1,034,549	1,122,475

Projected Full Development Water Demand (Revised Projection)

TOTAL OF EXISTING AREA DEMANDS

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	1,691,800	1,742,800	1,769,600	1,796,400	1,815,550	1,834,700
Total of Residential, Commercial, Industrial, and Institutional						
Land Use Area (ha) (Annex.F)	11,363	11,774	12,034	12,293	12,418	12,542
Ave. Net Population Density (pop./ha)	149	148	147	146	146	146
B. Total Service Population (A*B/100)	1,561,665	1,742,800	1,769,600	1,796,400	1,815,550	1,834,700
C. Average Service Ratio (% to Total Pop.)	92	100	100	100	100	100
D. Direct Connection						
Total Population	986,620	1,157,234	1,235,362	1,315,200	1,390,842	1,467,760
Water Use (m3/d)	147,664	190,944	214,335	239,366	265,651	293,552
E. Community Tap						
Total Population	495,289	436,580	331,233	223,354	112,712	0
Water Use (m3/d)	26,250	23,139	17,555	11,838	5,974	0
F. Yard Tap						
Total Population	79,755	148,987	203,005	257,846	311,996	366,940
Water Use (m3/d)	5,982	11,174	15,225	19,338	23,400	27,521
H. Total Domestic Water Use (D+E+F)						
Total Connected Population	1,561,665	1,742,800	1,769,600	1,796,400	1,815,550	1,834,700
Total Domestic Water Use (m3/d)	179,896	225,256	247,116	270,543	295,024	321,073
I. Industrial Water Use						
Total Industrial Area (ha)	877	986	1,082	1,177	1,208	1,238
Industrial Water Use (m3/d)	7,606	8,255	8,843	9,432	9,340	9,249
J. Commercial Water Use						
Total Commercial Area (ha)	585	636	679	721	744	766
Commercial Water Use (m3/d)	46,105	51,936	57,325	62,911	64,352	65,793
K. Institutional Water Use						
Total Institutional Area (ha)	1,035	1,056	1,068	1,080	1,090	1,099
Institutional Water Use (m3/d)	35,481	37,881	39,567	41,296	41,544	41,791
L. Total Net Water Use (m3/d) (H+I+J+K)	269,088	323,328	352,851	384,181	410,260	437,905
M. Water Loss						
Water Loss (m3/d)	146,839	138,521	150,879	164,011	154,415	144,249
N. Total Water Demand (m3/d) (L+M)	415,927	461,849	503,730	548,192	564,675	582,154

Projected Full Development Water Demand (Revised Projection)

District: COLOMBO

Division COLOMBO M.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	752,400	760,000	765,350	770,700	773,550	776,400
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	2,759	2,776	2,778	2,780	2,774	2,768
Net Population Density (pop./ha)	273	274	276	277	279	280
B. Service Ratio (%)	99	100	100	100	100	100
C. Total Service Population (A*B/100)	746,757	760,000	765,350	770,700	773,550	776,400
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	61.8	65.5	69.1	72.7	76.4	80.0
D2 Population (C*D1/100)	461,745	497,547	528,857	560,556	590,734	621,120
D3 Unit Rate (l/cap/d)	146	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	67,415	82,095	91,757	102,021	112,830	124,224
E. Community Tap						
E1 Percentage of Connected Population	34.8	27.9	20.9	13.9	7.0	0.0
E2 Population (C*E1/100)	260,120	211,787	159,958	107,384	53,891	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	13,786	11,225	8,478	5,691	2,856	0
F. Yard Tap						
F1 Percentage of Connected Population	3.3	6.7	10.0	13.3	16.7	20.0
F2 Population (C*F1/100)	24,892	50,667	76,535	102,760	128,925	155,280
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	1,867	3,800	5,740	7,707	9,669	11,646
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	746,757	760,000	765,350	770,700	773,550	776,400
H2 Total Domestic Water Use (m3/d)	83,068	97,120	105,975	115,420	125,356	135,870
I. Industrial Water Use						
Industrial Area (ha)	160	155	150	145	140	135
Unit Rate (l/ha/d)	16476	16476	16476	16476	16476	16476
Industrial Water Use (m3/d)	2,636	2,554	2,471	2,389	2,307	2,224
J. Commercial Water Use						
Commercial Area (ha)	223	225	225	225	225	225
Unit Rate (l/ha/d)	136411	146953	158311	170546	170546	170546
Commercial Water Use (m3/d)	30,420	33,065	35,620	38,373	38,373	38,373
K. Institutional Water Use						
Institutional Area (ha)	497	487	477	467	457	447
Unit Rate (l/ha/d)	32674	35199	37920	40850	40850	40850
Institutional Water Use (m3/d)	16,239	17,142	18,088	19,077	18,669	18,260
L. Total Net Water Use (m3/d) (H+I+J+K)	132,363	149,880	162,153	175,258	184,704	194,727
M. Water Loss						
M1 Water Loss Ratio (%)	40.0	35.0	35.0	35.0	32.5	30.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	88,242	80,705	87,313	94,370	88,931	83,454
N. Total Water Demand (m3/d) (L+M)	220,605	230,585	249,467	269,628	273,635	278,181

Projected Full Development Water Demand (Revised Projection)

District: COLOMBO

Division DEHIWELA-Mt.LAVINIA M.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	232,100	242,400	243,000	243,600	243,750	243,900
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	1,562	1,626	1,626	1,626	1,626	1,626
Net Population Density (pop./ha)	149	149	149	150	150	150
B. Service Ratio (%)	97	100	100	100	100	100
C. Total Service Population (A*B/100)	224,441	242,400	243,000	243,600	243,750	243,900
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	68.9	71.1	73.4	75.6	77.8	80.0
D2 Population (C*D1/100)	154,677	172,427	178,241	184,080	189,597	195,120
D3 Unit Rate (l/cap/d)	149	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	23,047	28,450	30,925	33,503	36,213	39,024
E. Community Tap						
E1 Percentage of Connected Population	27.8	22.2	16.7	11.1	5.5	0.0
E2 Population (C*E1/100)	62,282	53,813	40,460	27,040	13,528	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	3,301	2,852	2,144	1,433	717	0
F. Yard Tap						
F1 Percentage of Connected Population	3.3	6.7	10.0	13.3	16.7	20.0
F2 Population (C*F1/100)	7,481	16,160	24,300	32,480	40,625	48,780
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	561	1,212	1,823	2,436	3,047	3,659
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	224,441	242,400	243,000	243,600	243,750	243,900
H2 Total Domestic Water Use (m3/d)	26,909	32,515	34,892	37,372	39,977	42,683
I. Industrial Water Use						
Industrial Area (ha)	162	175	175	175	175	175
Unit Rate (l/ha/d)	3749	3749	3749	3749	3749	3749
Industrial Water Use (m3/d)	607	656	656	656	656	656
J. Commercial Water Use						
Commercial Area (ha)	29	31	31	31	31	31
Unit Rate (l/ha/d)	137667	137667	137667	137667	137667	137667
Commercial Water Use (m3/d)	3,992	4,268	4,268	4,268	4,268	4,268
K. Institutional Water Use						
Institutional Area (ha)	91	100	100	100	100	100
Unit Rate (l/ha/d)	76612	76612	76612	76612	76612	76612
Institutional Water Use (m3/d)	6,972	7,661	7,661	7,661	7,661	7,661
L. Total Net Water Use (m3/d) (H+I+J+K)	38,480	45,100	47,477	49,957	52,562	55,267
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	16,492	15,033	15,826	16,652	15,260	13,817
N. Total Water Demand (m3/d) (L+M)	54,972	60,133	63,302	66,609	67,822	69,084

Projected Full Development Water Demand (Revised Projection)
District: COLOMBO
Division: KOTTE U.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	135,900	141,400	146,700	152,000	156,450	160,900
Total of Residential, Commercial, Industrial and Institutional Land Use Area (ha) (Annex.F)	1,079	1,132	1,176	1,220	1,262	1,304
Net Population Density (pop./ha)	126	125	125	125	124	123
B. Service Ratio (%)	97	100	100	100	100	100
C. Total Service Population (A*B/100)	131,483	141,400	146,700	152,000	156,450	160,900
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	78.3	78.7	79.0	79.3	79.7	80.0
D2 Population (C*D1/100)	102,995	111,235	115,893	120,587	124,639	128,720
D3 Unit Rate (l/cap/d)	158	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	16,273	18,354	20,107	21,947	23,806	25,744
E. Community Tap						
E1 Percentage of Connected Population	18.3	14.7	11.0	7.3	3.7	0.0
E2 Population (C*E1/100)	24,105	20,739	16,137	11,147	5,737	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	1,278	1,099	855	591	304	0
F. Yard Tap						
F1 Percentage of Connected Population	3.3	6.7	10.0	13.3	16.7	20.0
F2 Population (C*F1/100)	4,383	9,427	14,670	20,267	26,075	32,180
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	329	707	1,100	1,520	1,956	2,414
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	131,483	141,400	146,700	152,000	156,450	160,900
H2 Total Domestic Water Use (m3/d)	17,880	20,160	22,063	24,058	26,066	28,158
I. Industrial Water Use						
Industrial Area (ha)	35	40	45	50	55	60
Unit Rate (l/ha/d)	3900	3900	3900	3900	3900	3900
Industrial Water Use (m3/d)	137	156	176	195	215	234
J. Commercial Water Use						
Commercial Area (ha)	52	62	72	82	92	102
Unit Rate (l/ha/d)	75338	75338	75338	75338	75338	75338
Commercial Water Use (m3/d)	3,918	4,671	5,424	6,178	6,931	7,684
K. Institutional Water Use						
Institutional Area (ha)	77	88	99	110	121	132
Unit Rate (l/ha/d)	37090	37090	37090	37090	37090	37090
Institutional Water Use (m3/d)	2,856	3,264	3,672	4,080	4,488	4,896
L. Total Net Water Use (m3/d) (H+I+J+K)	24,790	28,251	31,335	34,510	37,699	40,972
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	10,624	9,417	10,445	11,503	10,945	10,243
N. Total Water Demand (m3/d) (L+M)	35,414	37,668	41,780	46,014	48,644	51,215

Projected Full Development Water Demand (Revised Projection)

District: COLOMBO

Division KOLONNAWA U.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	56,000	59,600	59,800	60,000	60,050	60,100
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	343	392	426	460	494	527
Net Population Density (pop./ha)	163	152	140	130	122	114
B. Service Ratio (%)	100	100	100	100	100	100
C. Total Service Population (A*B/100)	55,720	59,600	59,800	60,000	60,050	60,100
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	41.3	49.0	56.8	64.5	72.3	80.0
D2 Population (C*D1/100)	22,985	29,204	33,937	38,700	43,386	48,080
D3 Unit Rate (l/cap/d)	158	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	3,632	4,819	5,888	7,043	8,287	9,616
E. Community Tap						
E1 Percentage of Connected Population	55.4	44.3	33.3	22.2	11.1	0.0
E2 Population (C*E1/100)	30,878	26,423	19,884	13,300	6,656	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	1,637	1,400	1,054	705	353	0
F. Yard Tap						
F1 Percentage of Connected Population	3.3	6.7	10.0	13.3	16.7	20.0
F2 Population (C*F1/100)	1,857	3,973	5,980	8,000	10,008	12,020
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	139	298	449	600	751	902
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	55,720	59,600	59,800	60,000	60,050	60,100
H2 Total Domestic Water Use (m3/d)	5,407	6,517	7,390	8,348	9,390	10,518
I. Industrial Water Use						
Industrial Area (ha)	90	121	152	183	214	244
Unit Rate (l/ha/d)	87	87	87	87	87	87
Industrial Water Use (m3/d)	8	11	13	16	19	21
J. Commercial Water Use						
Commercial Area (ha)	12	15	18	21	24	27
Unit Rate (l/ha/d)	85680	85680	85680	85680	85680	85680
Commercial Water Use (m3/d)	1,028	1,285	1,542	1,799	2,056	2,313
K. Institutional Water Use						
Institutional Area (ha)	6	7	7	7	7	7
Unit Rate (l/ha/d)	74813	74813	74813	74813	74813	74813
Institutional Water Use (m3/d)	449	524	524	524	524	524
L. Total Net Water Use (m3/d) (H+I+J+K)	6,892	8,336	9,469	10,687	11,989	13,376
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	2,954	2,779	3,156	3,562	3,481	3,344
N. Total Water Demand (m3/d) (L+M)	9,846	11,115	12,626	14,250	15,469	16,720

Projected Full Development Water Demand (Revised Projection)

District: COLOMBO

Division MORATUWA U.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	187,700	191,100	193,300	195,500	199,200	202,900
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	1,526	1,559	1,586	1,613	1,633	1,653
Net Population Density (pop./ha)	123	123	122	121	122	123
B. Service Ratio (%)	86	100	100	100	100	100
C. Total Service Population (A*B/100)	160,953	191,100	193,300	195,500	199,200	202,900
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.8	64.7	68.5	72.3	76.2	80.0
D2 Population (C*D1/100)	97,913	123,578	132,411	141,412	151,724	162,320
D3 Unit Rate (l/cap/d)	153	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	14,981	20,390	22,973	25,737	28,979	32,464
E. Community Tap						
E1 Percentage of Connected Population	35.8	28.7	21.5	14.3	7.2	0.0
E2 Population (C*E1/100)	57,675	54,782	41,560	28,022	14,276	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	3,057	2,903	2,203	1,485	757	0
F. Yard Tap						
F1 Percentage of Connected Population	3.3	6.7	10.0	13.3	16.7	20.0
F2 Population (C*F1/100)	5,365	12,740	19,330	26,067	33,200	40,580
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	402	956	1,450	1,955	2,490	3,044
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	160,953	191,100	193,300	195,500	199,200	202,900
H2 Total Domestic Water Use (m3/d)	18,440	24,249	26,626	29,177	32,226	35,508
I. Industrial Water Use						
Industrial Area (ha)	147	153	159	165	167	169
Unit Rate (l/ha/d)	6475	6475	6475	6475	6475	6475
Industrial Water Use (m3/d)	952	991	1,030	1,068	1,081	1,094
J. Commercial Water Use						
Commercial Area (ha)	83	95	107	118	122	125
Unit Rate (l/ha/d)	15291	15291	15291	15291	15291	15291
Commercial Water Use (m3/d)	1,269	1,453	1,628	1,804	1,858	1,911
K. Institutional Water Use						
Institutional Area (ha)	139	142	145	148	151	154
Unit Rate (l/ha/d)	3648	3648	3648	3648	3648	3648
Institutional Water Use (m3/d)	507	518	529	540	551	562
L. Total Net Water Use (m3/d) (H+I+J+K)	21,168	27,211	29,813	32,590	35,716	39,075
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	9,072	9,070	9,938	10,863	10,369	9,769
N. Total Water Demand (m3/d) (L+M)	30,240	36,281	39,750	43,453	46,085	48,844

Projected Full Development Water Demand (Revised Projection)

District: COLOMBO

Division KOTIKAWATTE-MULLERIYAWA P.S.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	92,400	98,500	101,500	104,500	107,400	110,300
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	1,483	1,515	1,531	1,546	1,552	1,557
Net Population Density (pop./ha)	62	65	66	68	69	71
B. Service Ratio (%)	67	100	100	100	100	100
C. Total Service Population (A*B/100)	61,908	98,500	101,500	104,500	107,400	110,300
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	49.3	55.5	61.6	67.7	73.9	80.0
D2 Population (C*D1/100)	30,541	54,635	62,524	70,781	79,333	88,240
D3 Unit Rate (l/cap/d)	148	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	4,520	9,015	10,848	12,882	15,153	17,648
E. Community Tap						
E1 Percentage of Connected Population	47.3	37.9	28.4	18.9	9.5	0.0
E2 Population (C*E1/100)	29,303	37,299	28,826	19,785	10,167	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	1,553	1,977	1,528	1,049	539	0
F. Yard Tap						
F1 Percentage of Connected Population	3.3	6.7	10.0	13.3	16.7	20.0
F2 Population (C*F1/100)	2,064	6,567	10,150	13,933	17,900	22,060
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	155	493	761	1,045	1,343	1,655
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	61,908	98,500	101,500	104,500	107,400	110,300
H2 Total Domestic Water Use (m3/d)	6,228	11,484	13,137	14,976	17,034	19,303
I. Industrial Water Use						
Industrial Area (ha)	133	136	138	140	132	124
Unit Rate (l/ha/d)	13078	13078	13078	13078	13078	13078
Industrial Water Use (m3/d)	1,739	1,779	1,805	1,831	1,726	1,622
J. Commercial Water Use						
Commercial Area (ha)	108	112	114	116	118	120
Unit Rate (l/ha/d)	686	686	686	686	686	686
Commercial Water Use (m3/d)	74	77	78	80	81	82
K. Institutional Water Use						
Institutional Area (ha)	94	96	98	100	102	104
Unit Rate (l/ha/d)	49968	49968	49968	49968	49968	49968
Institutional Water Use (m3/d)	4,697	4,797	4,897	4,997	5,097	5,197
L. Total Net Water Use (m3/d) (H+I+J+K)	12,738	18,136	19,917	21,883	23,938	26,203
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	5,459	6,045	6,639	7,294	6,950	6,551
N. Total Water Demand (m3/d) (L+M)	18,198	24,182	26,556	29,177	30,888	32,754

Projected Full Development Water Demand (Revised Projection)

District: GAMPAHA

Division PELIYAGODA U.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	36,500	36,800	36,900	37,000	37,150	37,300
Total of Residential, Commercial, Industrial, and Institutional						
Land Use Area (ha) (Annex.F)	259	265	266	266	266	266
Net Population Density (pop./ha)	141	139	139	139	140	140
B. Service Ratio (%)	72	100	100	100	100	100
C. Total Service Population (A*B/100)	26,208	36,800	36,900	37,000	37,150	37,300
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	68.9	71.1	73.3	75.6	77.8	80.0
D2 Population (C*D1/100)	18,054	26,169	27,060	27,956	28,894	29,840
D3 Unit Rate (l/cap/d)	158	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	2,853	4,318	4,695	5,088	5,519	5,968
E. Community Tap						
E1 Percentage of Connected Population	27.8	22.2	16.7	11.1	5.6	0.0
E2 Population (C*E1/100)	7,280	8,178	6,150	4,111	2,064	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	386	433	326	218	109	0
F. Yard Tap						
F1 Percentage of Connected Population	3.3	6.7	10.0	13.3	16.7	20.0
F2 Population (C*F1/100)	874	2,453	3,690	4,933	6,192	7,460
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	66	184	277	370	464	560
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	26,208	36,800	36,900	37,000	37,150	37,300
H2 Total Domestic Water Use (m3/d)	3,304	4,935	5,298	5,676	6,093	6,528
I. Industrial Water Use						
Industrial Area (ha)	61	63	63	63	63	63
Unit Rate (l/ha/d)	10419	10419	10419	10419	10419	10419
Industrial Water Use (m3/d)	636	656	656	656	656	656
J. Commercial Water Use						
Commercial Area (ha)	16	17	17	17	17	17
Unit Rate (l/ha/d)	105834	105834	105834	105834	105834	105834
Commercial Water Use (m3/d)	1,693	1,799	1,799	1,799	1,799	1,799
K. Institutional Water Use						
Institutional Area (ha)	5	6	6	6	6	6
Unit Rate (l/ha/d)	50824	50824	50824	50824	50824	50824
Institutional Water Use (m3/d)	254	305	305	305	305	305
L. Total Net Water Use (m3/d) (H+I+J+K)	5,887	7,696	8,058	8,436	8,853	9,288
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	2,523	2,565	2,686	2,812	2,570	2,322
N. Total Water Demand (m3/d) (L+M)	8,410	10,261	10,744	11,248	11,423	11,610

Projected Full Development Water Demand (Revised Projection)

District: GAMPAHA

Division WATTALA MABOLE U.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	27,800	28,900	29,450	30,000	30,800	31,600
Total of Residential, Commercial, Industrial, and Institutional						
Land Use Area (ha) (Annex.F)	281	277	289	301	313	325
Net Population Density (pop./ha)	107	104	102	100	98	97
B. Service Ratio (%)	70	100	100	100	100	100
C. Total Service Population (A*B/100)	19,563	28,900	29,450	30,000	30,800	31,600
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	68.9	71.1	73.3	75.6	77.8	80.0
D2 Population (C*D1/100)	13,477	20,551	21,597	22,667	23,956	25,280
D3 Unit Rate (l/cap/d)	158	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	2,129	3,391	3,747	4,125	4,576	5,056
E. Community Tap						
E1 Percentage of Connected Population	5.3	4.2	3.2	2.1	1.1	0.0
E2 Population (C*E1/100)	1,032	1,220	933	633	325	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	55	65	49	34	17	0
F. Yard Tap						
F1 Percentage of Connected Population	25.8	24.7	23.5	22.3	21.2	20.0
F2 Population (C*F1/100)	5,054	7,129	6,921	6,700	6,519	6,320
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	379	535	519	503	489	474
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	19,563	28,900	29,450	30,000	30,800	31,600
H2 Total Domestic Water Use (m3/d)	2,563	3,990	4,316	4,661	5,082	5,530
I. Industrial Water Use						
Industrial Area (ha)	38	43	48	52	57	61
Unit Rate (l/ha/d)	10419	10419	10419	10419	10419	10419
Industrial Water Use (m3/d)	396	448	495	542	589	636
J. Commercial Water Use						
Commercial Area (ha)	7	11	15	18	22	25
Unit Rate (l/ha/d)	105834	105834	105834	105834	105834	105834
Commercial Water Use (m3/d)	741	1,164	1,535	1,905	2,275	2,646
K. Institutional Water Use						
Institutional Area (ha)	8	9	10	11	12	13
Unit Rate (l/ha/d)	50824	50824	50824	50824	50824	50824
Institutional Water Use (m3/d)	407	457	508	559	610	661
L. Total Net Water Use (m3/d) (H+I+J+K)	4,106	6,060	6,853	7,667	8,556	9,472
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	1,760	2,020	2,284	2,556	2,484	2,368
N. Total Water Demand (m3/d) (L+M)	5,866	8,080	9,138	10,223	11,040	11,840

Projected Full Development Water Demand (Revised Projection)
District: GAMPAHA
Division: KELANIYA P.S.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	120,900	132,300	140,700	149,100	151,500	153,900
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	1,435	1,557	1,667	1,777	1,779	1,780
Net Population Density (pop./ha)	84	85	84	84	85	86
B. Service Ratio (%)	72	100	100	100	100	100
C. Total Service Population (A*B/100)	87,650	132,300	140,700	149,100	151,500	153,900
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	64.4	67.5	70.6	73.7	76.9	80.0
D2 Population (C*D1/100)	56,406	89,280	99,351	109,949	116,459	123,120
D3 Unit Rate (l/cap/d)	158	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	8,912	14,731	17,237	20,011	22,244	24,624
E. Community Tap						
E1 Percentage of Connected Population	9.8	7.9	5.9	3.9	2.0	0.0
E2 Population (C*E1/100)	8,601	10,386	8,284	5,852	2,973	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	456	550	439	310	158	0
F. Yard Tap						
F1 Percentage of Connected Population	25.8	24.7	23.5	22.3	21.2	20.0
F2 Population (C*F1/100)	22,643	32,634	33,065	33,299	32,068	30,780
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	1,698	2,448	2,480	2,497	2,405	2,309
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	87,650	132,300	140,700	149,100	151,500	153,900
H2 Total Domestic Water Use (m3/d)	11,066	17,729	20,156	22,818	24,806	26,933
I. Industrial Water Use						
Industrial Area (ha)	39	87	137	187	187	187
Unit Rate (l/ha/d)	10419	10419	10419	10419	10419	10419
Industrial Water Use (m3/d)	406	906	1,427	1,948	1,948	1,948
J. Commercial Water Use						
Commercial Area (ha)	24	35	47	59	59	59
Unit Rate (l/ha/d)	105834	105834	105834	105834	105834	105834
Commercial Water Use (m3/d)	2,540	3,704	4,974	6,244	6,244	6,244
K. Institutional Water Use						
Institutional Area (ha)	49	51	54	57	59	60
Unit Rate (l/ha/d)	50824	50824	50824	50824	50824	50824
Institutional Water Use (m3/d)	2,490	2,592	2,744	2,897	2,973	3,049
L. Total Net Water Use (m3/d) (H+I+J+K)	16,503	24,932	29,302	33,908	35,972	38,174
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	7,073	8,311	9,767	11,303	10,444	9,544
N. Total Water Demand (m3/d) (L+M)	23,576	33,243	39,070	45,210	46,416	47,718

Projected Full Development Water Demand (Revised Projection)

District: KALUTARA

Division PANADURA U.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	38,000	38,600	38,600	38,600	38,950	39,300
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	470	475	477	478	481	484
Net Population Density (pop./ha)	81	81	81	81	81	81
B. Service Ratio (%)	97	100	100	100	100	100
C. Total Service Population (A*B/100)	37,000	38,600	38,600	38,600	38,950	39,300
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	61.9	65.6	69.2	72.8	76.4	80.0
D2 Population (C*D1/100)	22,919	25,304	26,698	28,092	29,753	31,440
D3 Unit Rate (l/cap/d)	139	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	3,186	4,175	4,632	5,113	5,683	6,288
E. Community Tap						
E1 Percentage of Connected Population	34.7	27.8	20.8	13.9	6.9	0.0
E2 Population (C*E1/100)	12,847	10,722	8,042	5,361	2,705	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	681	568	426	284	143	0
F. Yard Tap						
F1 Percentage of Connected Population	3.3	6.7	10.0	13.3	16.7	20.0
F2 Population (C*F1/100)	1,233	2,573	3,860	5,147	6,492	7,860
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	93	193	290	386	487	590
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	37,000	38,600	38,600	38,600	38,950	39,300
H2 Total Domestic Water Use (m3/d)	3,959	4,937	5,348	5,783	6,313	6,878
I. Industrial Water Use						
Industrial Area (ha)	4	4	5	5	5	5
Unit Rate (l/ha/d)	4200	4200	4200	4200	4200	4200
Industrial Water Use (m3/d)	17	17	19	21	21	21
J. Commercial Water Use						
Commercial Area (ha)	19	19	19	19	19	19
Unit Rate (l/ha/d)	16100	16100	16100	16100	16100	16100
Commercial Water Use (m3/d)	306	306	306	306	306	306
K. Institutional Water Use						
Institutional Area (ha)	38	38	39	40	40	40
Unit Rate (l/ha/d)	7788	7788	7788	7788	7788	7788
Institutional Water Use (m3/d)	296	296	304	312	312	312
L. Total Net Water Use (m3/d) (H+I+J+K)	4,578	5,555	5,976	6,421	6,952	7,516
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	1,962	1,852	1,992	2,140	2,018	1,879
N. Total Water Demand (m3/d) (L+M)	6,540	7,407	7,969	8,562	8,970	9,395

Projected Full Development Water Demand (Revised Projection)
District: KALUTARA
Division HORANA U.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	12,100	13,200	14,300	15,400	16,750	18,100
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	186	200	213	226	239	252
Net Population Density (pop./ha)	65	66	67	68	70	72
B. Service Ratio (%)	83	100	100	100	100	100
C. Total Service Population (A*B/100)	9,983	13,200	14,300	15,400	16,750	18,100
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	49.2	55.3	61.5	67.7	73.8	80.0
D2 Population (C*D1/100)	4,908	7,304	8,795	10,421	12,367	14,480
D3 Unit Rate (l/cap/d)	146	165	173.5	182	191	200
D4 Water Use (m3/d) (D2*D3/1000)	717	1,205	1,526	1,897	2,362	2,896
E. Community Tap						
E1 Percentage of Connected Population	11.7	9.3	7.0	4.7	2.3	0.0
E2 Population (C*E1/100)	1,165	1,232	1,001	719	391	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	62	65	53	38	21	0
F. Yard Tap						
F1 Percentage of Connected Population	39.2	35.3	31.5	27.7	23.8	20.0
F2 Population (C*F1/100)	3,910	4,664	4,505	4,261	3,992	3,620
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	293	350	338	320	299	272
Total of Percentage (D4+E4+F4)	100	100	100	100	100	100
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	9,983	13,200	14,300	15,400	16,750	18,100
H2 Total Domestic Water Use (m3/d)	1,072	1,620	1,917	2,254	2,682	3,168
I. Industrial Water Use						
Industrial Area (ha)	8	9	11	12	14	15
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	73	82	95	109	122	136
J. Commercial Water Use						
Commercial Area (ha)	12	14	15	15	16	16
Unit Rate (l/ha/d)	10350	10350	10350	10350	10350	10350
Commercial Water Use (m3/d)	124	145	150	155	160	166
K. Institutional Water Use						
Institutional Area (ha)	31	32	33	34	35	36
Unit Rate (l/ha/d)	10150	10150	10150	10150	10150	10150
Institutional Water Use (m3/d)	315	325	335	345	355	365
L. Total Net Water Use (m3/d) (H+I+J+K)	1,583	2,172	2,497	2,863	3,320	3,834
M. Water Loss						
M1 Water Loss Ratio (%)	30.0	25.0	25.0	25.0	22.5	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	678	724	832	954	964	959
N. Total Water Demand (m3/d) (L+M)	2,261	2,895	3,329	3,818	4,284	4,793

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

TOTAL OF NEW SERVICE AREA DEMAND

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	1,486,650	1,681,000	1,875,175	2,069,350	2,272,725	2,476,100
Total of Residential, Commercial, Industrial, and Institutional						
Land Use Area (ha) (Annex.F)	24,242	26,094	27,691	29,287	30,652	32,016
Net Population Density (pop./ha)	61	64	68	71	74	77
B. Total Service Population (A*B/100)	1,139,765	1,316,783	1,500,140	1,689,969	1,893,938	2,104,685
C. Average Service Ratio	77	78	80	82	83	85
D. Direct Connection						
Total Population	683,859	790,070	900,084	1,013,982	1,136,363	1,262,811
Water Use (m3/d)	86,166	105,079	125,562	148,041	175,000	204,575
E. Community Tap						
Total Population	94,980	87,786	75,007	56,332	31,566	0
Water Use (m3/d)	5,034	4,653	3,975	2,986	1,673	0
F. Yard Tap						
Total Population	360,926	438,928	525,049	619,655	726,009	841,874
Water Use (m3/d)	27,069	32,920	39,379	46,474	54,451	63,141
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	1,139,765	1,316,783	1,500,140	1,689,969	1,893,938	2,104,685
H2 Total Domestic Water Use (m3/d)	118,270	142,652	168,916	197,501	231,124	267,716
I. Industrial Water Use						
Total Industrial Area (ha)	2,007	2,506	2,939	3,372	3,766	4,160
Industrial Water Use (m3/d)	18,188	22,717	26,639	30,561	34,133	37,706
J. Commercial Water Use						
Total Commercial Area (ha)	967	1,048	1,116	1,184	1,252	1,320
Commercial Water Use (m3/d)	53,632	58,807	63,046	67,286	71,486	75,687
K. Institutional Water Use						
Total Institutional Area (ha)	1,239	1,390	1,495	1,601	1,694	1,788
Institutional Water Use (m3/d)	35,467	40,001	42,980	45,959	48,553	51,148
L. Total Net Water Use (m3/d) (H+I+J+K)	225,557	264,176	301,580	341,305	385,296	432,257
M. Water Loss						
Water Loss (m3/d)	25,062	36,024	49,094	65,011	84,577	108,064
N. Total Water Demand (m3/d) (L+M)	250,619	300,200	350,675	406,317	469,873	540,321

Projected Full Development Water Demand (Revised In Commercial/Institutional Unit Consumption)
District: COLOMBO
Division KADUWELA P.S.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	206,600	245,500	290,525	335,550	380,575	425,600
Total of Residential, Commercial, Industrial and Institutional Land Use Area (ha)	1,826	2,133	2,417	2,700	2,984	3,267
Net Population Density (pop./ha)	113	115	120	124	128	130
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	158,393	192,308	232,420	274,033	317,146	361,760
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	95,036	115,385	139,452	164,420	190,288	217,056
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	11,975	15,346	19,454	24,005	29,304	35,163
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	13,199	12,821	11,621	9,134	5,286	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	700	679	616	484	280	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	50,158	64,103	81,347	100,479	121,573	144,704
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	3,762	4,808	6,101	7,536	9,118	10,853
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	158,393	192,308	232,420	274,033	317,146	361,760
H2 Total Domestic Water Use (m3/d)	16,436	20,833	26,170	32,025	38,702	46,016
I. Industrial Water Use						
Industrial Area (ha)	307	407	507	607	707	807
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	2,783	3,689	4,595	5,502	6,408	7,315
J. Commercial Water Use						
Commercial Area (ha)	80	90	100	110	120	130
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	6,236	7,016	7,795	8,575	9,354	10,134
K. Institutional Water Use						
Institutional Area (ha)	113	160	184	207	231	254
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	3,777	5,348	6,134	6,919	7,705	8,490
L. Total Net Water Use (m3/d) (H+I+J+K)	29,232	36,886	44,695	53,021	62,169	71,954
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	3,248	5,030	7,276	10,099	13,647	17,989
N. Total Water Demand (m3/d) (L+M)	32,480	41,916	51,971	63,120	75,816	89,943

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: COLOMBO

Division MAHARAGAMA P.S.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	132,300	144,000	148,950	153,900	158,600	163,300
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	1,467	1,528	1,551	1,574	1,597	1,620
Net Population Density (pop./ha)	90	94	96	98	99	101
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	101,430	112,800	119,160	125,685	132,167	138,805
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	60,858	67,680	71,496	75,411	79,300	83,283
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	7,668	9,001	9,974	11,010	12,212	13,492
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	8,453	7,520	5,958	4,190	2,203	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	448	399	316	222	117	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	32,120	37,600	41,706	46,085	50,664	55,522
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	2,409	2,820	3,128	3,456	3,800	4,164
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	101,430	112,800	119,160	125,685	132,167	138,805
H2 Total Domestic Water Use (m3/d)	10,525	12,220	13,417	14,688	16,129	17,656
I. Industrial Water Use						
Industrial Area (ha)	33	37	40	42	45	47
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	299	335	358	381	403	426
J. Commercial Water Use						
Commercial Area (ha)	30	35	37	39	41	43
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	2,339	2,728	2,884	3,040	3,196	3,352
K. Institutional Water Use						
Institutional Area (ha)	100	103	105	107	109	111
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	3,343	3,443	3,510	3,577	3,643	3,710
L. Total Net Water Use (m3/d) (H+I+J+K)	16,505	18,727	20,169	21,686	23,372	25,144
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	1,834	2,554	3,283	4,131	5,130	6,286
N. Total Water Demand (m3/d) (L+M)	18,339	21,280	23,453	25,816	28,502	31,430

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: GAMPAHA

Division BIYAGAMA P.S.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	132,100	142,900	154,050	165,200	180,300	195,400
Total of Residential, Commercial, Industrial and Institutional Land Use Area (ha) (Annex.F)	2,732	2,874	2,994	3,114	3,234	3,354
Net Population Density (pop./ha)	48	50	51	53	56	58
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	101,277	111,938	123,240	134,913	150,250	166,090
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	60,766	67,163	73,944	80,948	90,150	99,654
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	7,657	8,933	10,315	11,818	13,883	16,144
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	8,440	7,463	6,162	4,497	2,504	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	447	396	327	238	133	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	32,071	37,313	43,134	49,468	57,596	66,436
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	2,405	2,798	3,235	3,710	4,320	4,983
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	101,277	111,938	123,240	134,913	150,250	166,090
H2 Total Domestic Water Use (m3/d)	10,509	12,127	13,877	15,767	18,336	21,127
I. Industrial Water Use						
Industrial Area (ha)	325	400	455	510	565	620
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	2,946	3,626	4,124	4,623	5,121	5,620
J. Commercial Water Use						
Commercial Area (ha)	40	44	47	49	52	54
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	3,118	3,430	3,625	3,820	4,014	4,209
K. Institutional Water Use						
Institutional Area (ha)	27	30	33	35	38	40
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	903	1,003	1,086	1,170	1,253	1,337
L. Total Net Water Use (m3/d) (H+I+J+K)	17,475	20,185	22,712	25,379	28,725	32,293
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	1,942	2,752	3,697	4,834	6,305	8,073
N. Total Water Demand (m3/d) (L+M)	19,417	22,937	26,409	30,213	35,030	40,366

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: KALUTARA

Division BANDARAGAMA P.S.(PART)

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	62,400	72,400	82,350	92,300	102,400	112,500
Total of Residential, Commercial, Industrial and Institutional Land Use Area (ha) (Annex.F)	2,695	2,850	3,005	3,160	3,297	3,433
Net Population Density (pop./ha)	23	25	27	29	31	33
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	47,840	56,713	65,880	75,378	85,333	95,625
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	28,704	34,028	39,528	45,227	51,200	57,375
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	3,617	4,526	5,514	6,603	7,885	9,295
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	3,987	3,781	3,294	2,513	1,422	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	211	200	175	133	75	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	15,149	18,904	23,058	27,639	32,711	38,250
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	1,136	1,418	1,729	2,073	2,453	2,869
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	47,840	56,713	65,880	75,378	85,333	95,625
H2 Total Domestic Water Use (m3/d)	4,964	6,144	7,418	8,809	10,414	12,164
I. Industrial Water Use						
Industrial Area (ha)	200	240	280	320	360	400
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	1,813	2,175	2,538	2,900	3,263	3,626
J. Commercial Water Use						
Commercial Area (ha)	190	200	210	220	230	240
Unit Rate (l/ha/d)	10350	10350	10350	10350	10350	10350
Commercial Water Use (m3/d)	1,967	2,070	2,174	2,277	2,381	2,484
K. Institutional Water Use						
Institutional Area (ha)	145	160	175	190	205	220
Unit Rate (l/ha/d)	10150	10150	10150	10150	10150	10150
Institutional Water Use (m3/d)	1,472	1,624	1,776	1,929	2,081	2,233
L. Total Net Water Use (m3/d) (H+I+J+K)	10,215	12,013	13,906	15,915	18,138	20,506
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	1,135	1,638	2,264	3,031	3,981	5,127
N. Total Water Demand (m3/d) (L+M)	11,350	13,651	16,169	18,947	22,119	25,633

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: COLOMBO

Division HOMAGAMA P.S. (PART)

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	65,250	71,100	73,550	76,000	78,250	80,500
Total of Residential, Commercial, Industrial and Institutional Land Use Area (ha) (Annex.F)	985	1,192	1,315	1,438	1,480	1,522
Net Population Density (pop./ha)	66	60	56	53	53	53
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	50,025	55,695	58,840	62,067	65,208	68,425
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	30,015	33,417	35,304	37,240	39,125	41,055
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	3,782	4,444	4,925	5,437	6,025	6,651
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	4,169	3,713	2,942	2,069	1,087	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	221	197	156	110	58	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	15,841	18,565	20,594	22,758	24,997	27,370
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	1,188	1,392	1,545	1,707	1,875	2,053
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	50,025	55,695	58,840	62,067	65,208	68,425
H2 Total Domestic Water Use (m3/d)	5,191	6,034	6,625	7,254	7,958	8,704
I. Industrial Water Use						
Industrial Area (ha)	100	153	209	265	283	300
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	906	1,387	1,894	2,402	2,561	2,719
J. Commercial Water Use						
Commercial Area (ha)	19	23	26	28	30	32
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	1,481	1,793	1,988	2,183	2,339	2,494
K. Institutional Water Use						
Institutional Area (ha)	245	255	270	284	287	290
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	8,189	8,524	9,008	9,493	9,593	9,694
L. Total Net Water Use (m3/d) (H+I+J+K)	15,768	17,737	19,516	21,331	22,450	23,611
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	1,752	2,419	3,177	4,063	4,928	5,903
N. Total Water Demand (m3/d) (L+M)	17,520	20,156	22,693	25,394	27,378	29,514

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: KALUTARA

Division HORANA P.S.(PART)

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	27,800	33,900	39,950	46,000	51,300	56,600
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	1,571	1,650	1,729	1,808	1,869	1,929
Net Population Density (pop./ha)	18	21	23	25	27	29
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	21,313	26,555	31,960	37,567	42,750	48,110
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	12,788	15,933	19,176	22,540	25,650	28,866
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	1,611	2,119	2,675	3,291	3,950	4,676
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	1,776	1,770	1,598	1,252	712	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	94	94	85	66	38	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	6,749	8,852	11,186	13,774	16,388	19,244
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	506	664	839	1,033	1,229	1,443
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	21,313	26,555	31,960	37,567	42,750	48,110
H2 Total Domestic Water Use (m3/d)	2,212	2,877	3,599	4,390	5,217	6,120
I. Industrial Water Use						
Industrial Area (ha)	84	94	104	114	124	134
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	761	852	943	1,033	1,124	1,215
J. Commercial Water Use						
Commercial Area (ha)	132	138	144	150	156	162
Unit Rate (l/ha/d)	10350	10350	10350	10350	10350	10350
Commercial Water Use (m3/d)	1,366	1,428	1,490	1,553	1,615	1,677
K. Institutional Water Use						
Institutional Area (ha)	110	118	126	134	142	150
Unit Rate (l/ha/d)	10150	10150	10150	10150	10150	10150
Institutional Water Use (m3/d)	1,117	1,198	1,279	1,360	1,441	1,523
L. Total Net Water Use (m3/d) (H+I+J+K)	5,456	6,355	7,311	8,336	9,397	10,533
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	606	867	1,190	1,588	2,063	2,633
N. Total Water Demand (m3/d) (L+M)	6,062	7,221	8,501	9,924	11,459	13,167

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: GAMPAHA

Division JA-ELA P.S.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	156,000	180,700	206,000	231,300	265,650	300,000
Total of Residential, Commercial, Industrial, and Institutional						
Land Use Area (ha) (Annex.F)	2,022	2,225	2,399	2,573	2,747	2,921
Net Population Density (pop./ha)	77	81	86	90	97	103
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	119,600	141,548	164,800	188,895	221,375	255,000
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	71,760	84,929	98,880	113,337	132,825	153,000
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	9,042	11,296	13,794	16,547	20,455	24,786
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	9,967	9,437	8,240	6,297	3,690	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	528	500	437	334	196	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	37,873	47,183	57,680	69,262	84,860	102,000
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	2,841	3,539	4,326	5,195	6,365	7,650
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	119,600	141,548	164,800	188,895	221,375	255,000
H2 Total Domestic Water Use (m3/d)	12,410	15,334	18,556	22,076	27,015	32,436
I. Industrial Water Use						
Industrial Area (ha)	250	300	325	350	375	400
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	2,266	2,719	2,946	3,172	3,399	3,626
J. Commercial Water Use						
Commercial Area (ha)	48	50	53	55	58	60
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	3,742	3,898	4,092	4,287	4,482	4,677
K. Institutional Water Use						
Institutional Area (ha)	134	148	158	168	178	188
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	4,479	4,947	5,281	5,616	5,950	6,284
L. Total Net Water Use (m3/d) (H+I+J+K)	22,897	26,898	30,876	35,151	40,846	47,023
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	2,544	3,668	5,026	6,695	8,966	11,756
N. Total Water Demand (m3/d) (L+M)	25,441	30,566	35,902	41,846	49,812	58,778

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: GAMPAHA
Division JA-ELA U.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	35,900	38,600	42,300	46,000	50,300	54,600
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	447	472	499	525	549	572
Net Population Density (pop./ha)	80	82	85	88	92	95
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	27,523	30,237	33,840	37,567	41,917	46,410
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	16,514	18,142	20,304	22,540	25,150	27,846
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	2,081	2,413	2,832	3,291	3,873	4,511
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	2,294	2,016	1,692	1,252	699	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	122	107	90	66	37	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	8,716	10,079	11,844	13,774	16,068	18,564
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	654	756	888	1,033	1,205	1,392
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	27,523	30,237	33,840	37,567	41,917	46,410
H2 Total Domestic Water Use (m3/d)	2,856	3,276	3,810	4,390	5,115	5,903
I. Industrial Water Use						
Industrial Area (ha)	18	22	25	28	31	34
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	163	199	227	254	281	308
J. Commercial Water Use						
Commercial Area (ha)	9	11	13	14	16	17
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	702	857	974	1,091	1,208	1,325
K. Institutional Water Use						
Institutional Area (ha)	12	16	18	20	22	24
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	401	535	602	669	735	802
L. Total Net Water Use (m3/d) (H+I+J+K)	4,122	4,867	5,613	6,404	7,340	8,339
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	458	664	914	1,220	1,611	2,085
N. Total Water Demand (m3/d) (L+M)	4,580	5,531	6,527	7,624	8,951	10,424

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: GAMPAHA

Division KATANA P.S. (PART)

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	63,100	81,300	97,100	112,900	134,550	156,200
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	1,571	1,697	1,798	1,898	1,999	2,099
Net Population Density (pop./ha)	40	48	54	59	67	74
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	48,377	63,685	77,680	92,202	112,125	132,770
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	29,026	38,211	46,808	55,321	67,275	79,662
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	3,657	5,082	6,502	8,077	10,360	12,905
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	4,031	4,246	3,884	3,073	1,869	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	214	225	206	163	99	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	15,319	21,228	27,188	33,807	42,981	53,108
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	1,149	1,592	2,039	2,536	3,224	3,983
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	48,377	63,685	77,680	92,202	112,125	132,770
H2 Total Domestic Water Use (m3/d)	5,020	6,899	8,747	10,775	13,683	16,888
I. Industrial Water Use						
Industrial Area (ha)	87	93	98	103	108	113
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	789	843	888	934	979	1,024
J. Commercial Water Use						
Commercial Area (ha)	186	196	201	206	211	216
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	14,499	15,278	15,668	16,058	16,448	16,837
K. Institutional Water Use						
Institutional Area (ha)	98	108	113	118	123	128
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	3,276	3,610	3,777	3,944	4,111	4,279
L. Total Net Water Use (m3/d) (H+I+J+K)	23,583	26,631	29,080	31,711	35,221	39,029
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	2,620	3,631	4,734	6,040	7,731	9,757
N. Total Water Demand (m3/d) (L+M)	26,203	30,262	33,814	37,751	42,952	48,786

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: COLOMBO

Division KESBEWA P.S.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	191,300	217,900	248,450	279,000	309,550	340,100
Total of Residential, Commercial, Industrial and Institutional Land Use Area (ha) (Annex.F)	2,639	2,852	3,065	3,278	3,491	3,704
Net Population Density (pop./ha)	72	76	81	85	89	92
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	146,663	170,688	198,760	227,850	257,958	289,085
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	87,998	102,413	119,256	136,710	154,775	173,451
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	11,088	13,621	16,636	19,960	23,835	28,099
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	12,222	11,379	9,938	7,595	4,299	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	648	603	527	403	228	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	46,443	56,896	69,566	83,545	98,884	115,634
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	3,483	4,267	5,217	6,266	7,416	8,673
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	146,663	170,688	198,760	227,850	257,958	289,085
H2 Total Domestic Water Use (m3/d)	15,219	18,491	22,380	26,628	31,480	36,772
I. Industrial Water Use						
Industrial Area (ha)	260	344	428	512	596	680
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	2,357	3,118	3,879	4,641	5,402	6,164
J. Commercial Water Use						
Commercial Area (ha)	45	62	79	96	113	130
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	3,508	4,833	6,158	7,483	8,808	10,134
K. Institutional Water Use						
Institutional Area (ha)	84	94	104	114	124	134
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	2,808	3,142	3,476	3,811	4,145	4,479
L. Total Net Water Use (m3/d) (H+I+J+K)	23,891	29,584	35,894	42,563	49,835	57,548
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	2,655	4,034	5,843	8,107	10,939	14,387
N. Total Water Demand (m3/d) (L+M)	26,546	33,618	41,737	50,670	60,774	71,935

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: GAMPAHA

Division MAHARA P.S.(PART)

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	113,900	125,600	137,200	148,800	164,450	180,100
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	2,210	2,340	2,451	2,561	2,672	2,782
Net Population Density (pop./ha)	52	54	56	58	62	65
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	87,323	98,387	109,760	121,520	137,042	153,085
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	52,394	59,032	65,856	72,912	82,225	91,851
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	6,602	7,851	9,187	10,645	12,663	14,880
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	7,277	6,559	5,488	4,051	2,284	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	386	348	291	215	121	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	27,652	32,796	38,416	44,557	52,533	61,234
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	2,074	2,460	2,881	3,342	3,940	4,593
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	87,323	98,387	109,760	121,520	137,042	153,085
H2 Total Domestic Water Use (m3/d)	9,061	10,659	12,359	14,202	16,724	19,472
I. Industrial Water Use						
Industrial Area (ha)	220	260	295	330	365	400
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	1,994	2,357	2,674	2,991	3,308	3,626
J. Commercial Water Use						
Commercial Area (ha)	90	95	101	106	112	117
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	7,016	7,405	7,834	8,263	8,692	9,120
K. Institutional Water Use						
Institutional Area (ha)	90	110	118	125	133	140
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	3,008	3,677	3,928	4,178	4,429	4,680
L. Total Net Water Use (m3/d) (H+I+J+K)	21,079	24,097	26,794	29,634	33,152	36,898
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	2,342	3,286	4,362	5,645	7,277	9,224
N. Total Water Demand (m3/d) (L+M)	23,421	27,383	31,156	35,278	40,430	46,122

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: KALUTARA

Division: PANADURA P.S. (PART)

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	109,800	112,400	115,000	117,600	120,800	124,000
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	1,571	1,597	1,622	1,647	1,672	1,697
Net Population Density (pop./ha)	70	70	71	71	72	73
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	84,180	88,047	92,000	96,040	100,667	105,400
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	50,508	52,828	55,200	57,624	60,400	63,240
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	6,364	7,026	7,700	8,413	9,302	10,245
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	7,015	5,870	4,600	3,201	1,678	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	372	311	244	170	89	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	26,657	29,349	32,200	35,215	38,589	42,160
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	1,999	2,201	2,415	2,641	2,894	3,162
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	84,180	88,047	92,000	96,040	100,667	105,400
H2 Total Domestic Water Use (m3/d)	8,735	9,538	10,359	11,224	12,285	13,407
I. Industrial Water Use						
Industrial Area (ha)	28	30	31	31	32	32
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	254	272	276	281	285	290
J. Commercial Water Use						
Commercial Area (ha)	38	39	40	40	41	41
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	2,962	3,040	3,079	3,118	3,157	3,196
K. Institutional Water Use						
Institutional Area (ha)	36	36	37	37	38	38
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	1,203	1,203	1,220	1,237	1,253	1,270
L. Total Net Water Use (m3/d) (H+I+J+K)	13,154	14,054	14,935	15,860	16,981	18,163
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	1,462	1,916	2,431	3,021	3,727	4,541
N. Total Water Demand (m3/d) (L+M)	14,616	15,970	17,366	18,881	20,708	22,704

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: GAMPAHA

Division SEEDUWA KATUNAYAKE U.C.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	44,000	45,800	48,050	50,300	50,750	51,200
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	656	670	684	698	713	727
Net Population Density (pop./ha)	67	68	70	72	71	70
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	33,733	35,877	38,440	41,078	42,292	43,520
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	20,240	21,526	23,064	24,647	25,375	26,112
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	2,550	2,863	3,217	3,598	3,908	4,230
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	2,811	2,392	1,922	1,369	705	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	149	127	102	73	37	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	10,682	11,959	13,454	15,062	16,212	17,408
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	801	897	1,009	1,130	1,216	1,306
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	33,733	35,877	38,440	41,078	42,292	43,520
H2 Total Domestic Water Use (m3/d)	3,500	3,887	4,328	4,801	5,161	5,536
I. Industrial Water Use						
Industrial Area (ha)	31	31	32	33	33	34
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	278	284	290	296	302	308
J. Commercial Water Use						
Commercial Area (ha)	12	13	13	13	13	14
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	956	977	997	1,018	1,038	1,059
K. Institutional Water Use						
Institutional Area (ha)	30	30	31	32	32	33
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	991	1,012	1,033	1,055	1,076	1,097
L. Total Net Water Use (m3/d) (H+I+J+K)	5,725	6,159	6,648	7,169	7,577	7,999
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	636	840	1,082	1,365	1,663	2,000
N. Total Water Demand (m3/d) (L+M)	6,361	6,999	7,731	8,534	9,240	9,999

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: GAMPAHA

Division SITHAWAKA P.S. (PADUKKA TOWN)

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	7,100	9,000	9,550	10,100	11,500	12,900
Total of Residential, Commercial, Industrial, and Institutional						
Land Use Area (ha) (Annex.F)	121	131	141	150	148	146
Net Population Density (pop./ha)	59	69	68	67	78	88
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	5,443	7,050	7,640	8,248	9,583	10,965
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	3,266	4,230	4,584	4,949	5,750	6,579
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	412	563	639	723	886	1,066
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	454	470	382	275	160	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	24	25	20	15	8	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	1,724	2,350	2,674	3,024	3,674	4,386
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	129	176	201	227	276	329
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	5,443	7,050	7,640	8,248	9,583	10,965
H2 Total Domestic Water Use (m3/d)	565	764	860	964	1,169	1,395
I. Industrial Water Use						
Industrial Area (ha)	4	5	6	7	8	9
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	36	45	54	63	73	82
J. Commercial Water Use						
Commercial Area (ha)	6	7	8	9	10	11
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	468	546	624	702	780	857
K. Institutional Water Use						
Institutional Area (ha)	3	4	5	6	7	8
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	100	134	167	201	234	267
L. Total Net Water Use (m3/d) (H+I+J+K)	1,169	1,488	1,705	1,930	2,255	2,601
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	130	203	278	368	495	650
N. Total Water Demand (m3/d) (L+M)	1,299	1,691	1,983	2,297	2,751	3,251

Projected Full Development Water Demand (Revised in Commercial/Institutional Unit Consumption)

District: GAMPAHA

Division WATTALA P.S.

	YEAR					
	1995	2000	2005	2010	2015	2020
A. Projected Population	139,100	159,900	182,150	204,400	213,750	223,100
Total of Residential, Commercial, Industrial, and Institutional Land Use Area (ha) (Annex.F)	1,729	1,883	2,023	2,163	2,203	2,243
Net Population Density (pop./ha)	80	85	90	94	97	99
B. Service Ratio (%)	77	78	80	82	83	85
C. Total Service Population (A*B/100)	106,643	125,255	145,720	166,927	178,125	189,635
D. Direct Connection						
D1 Percentage of Connected Population (Projected)	60.0	60	60	60	60	60.0
D2 Population (C*D1/100)	63,986	75,153	87,432	100,156	106,875	113,781
D3 Unit Rate (l/cap/d)	126	133	139.5	146	154	162
D4 Water Use (m3/d) (D2*D3/1000)	8,062	9,995	12,197	14,623	16,459	18,433
E. Community Tap						
E1 Percentage of Connected Population	8.3	6.7	5.0	3.3	1.7	0.0
E2 Population (C*E1/100)	8,887	8,350	7,286	5,564	2,969	0
E3 Unit Rate (l/cap/d)	53	53	53	53	53	53
E4 Water Use (m3/d) (E2*E3/1000)	471	443	386	295	157	0
F. Yard Tap						
F1 Percentage of Connected Population	31.7	33.3	35.0	36.7	38.3	40.0
F2 Population (C*F1/100)	33,770	41,752	51,002	61,206	68,281	75,854
F3 Unit Rate (l/cap/d)	75	75	75	75	75	75
F4 Water Use (m3/d) (F2*F3/1000)	2,533	3,131	3,825	4,590	5,121	5,689
Total of Percentage (D4+E4+F4)	100.0	100.0	100.0	100.0	100.0	100.0
H. Total Domestic Water Use (D+E+F)						
H1 Total Connected Population	106,643	125,255	145,720	166,927	178,125	189,635
H2 Total Domestic Water Use (m3/d)	11,066	13,569	16,408	19,508	21,737	24,122
I. Industrial Water Use						
Industrial Area (ha)	60	90	105	120	135	150
Unit Rate (l/ha/d)	9064	9064	9064	9064	9064	9064
Industrial Water Use (m3/d)	544	816	952	1,088	1,224	1,360
J. Commercial Water Use						
Commercial Area (ha)	42	45	47	49	51	53
Unit Rate (l/ha/d)	77951	77951	77951	77951	77951	77951
Commercial Water Use (m3/d)	3,274	3,508	3,664	3,820	3,976	4,131
K. Institutional Water Use						
Institutional Area (ha)	12	18	21	24	27	30
Unit Rate (l/ha/d)	33426	33426	33426	33426	33426	33426
Institutional Water Use (m3/d)	401	602	702	802	903	1,003
L. Total Net Water Use (m3/d) (H+I+J+K)	15,285	18,495	21,725	25,218	27,839	30,615
M. Water Loss						
M1 Water Loss Ratio (%)	10.0	12.0	14.0	16.0	18.0	20.0
M2 Water Loss (m3/d) (L/(100-M1)*M1)	1,698	2,522	3,537	4,803	6,111	7,654
N. Total Water Demand (m3/d) (L+M)	16,983	21,016	25,262	30,021	33,950	38,269

CHAPTER 4

Ref. No. 4.2

Subject : Water Demand Projection

Title : Projection of Served Population

Contents : Allocation of Served Population to GS Level

Total Population Allocation New Service Area (Served Population - Development with Kalu G nga)

Service Area Category	Division	Node No.	Served Population										
			1990	1995	2000	2005	2010	2015	2020	2025	2030		
Towns East Area	Kaduvela	281	0	0	8,145	18,506	28,783	41,768	54,483	67,032	75,925	0	
	Panagoda	402	0	0	0	0	0	0	0	0	0	0	
	Pannipitiya	411	0	0	5,410	10,744	14,950	18,498	21,542	22,606	23,404	0	
	Madiwela/Kotte	528	0	10,536	12,449	13,832	15,079	16,234	17,338	17,482	17,590	0	
	Madiwela/Kotte	529	0	24,530	29,076	32,385	35,359	38,108	40,729	41,083	41,348	0	
	Maharagama	552	0	14,624	29,043	40,411	50,034	58,306	61,185	63,344	63,344	0	
	Batta. (High Zone)	563	0	0	19,176	43,570	67,766	92,342	116,876	122,647	126,976	0	
	Batta. (Low Zone)	568	0	0	2,876	6,535	10,165	13,851	17,531	18,397	19,046	0	
	Batta/Remote Zone	574	0	0	1,325	2,633	3,663	4,851	6,147	7,425	8,693	0	
	Total Towns East			0	35,066	93,081	157,248	216,175	278,887	338,772	364,602	384,072	0
Towns South Area	Homagama	498	0	0	3,519	6,989	9,725	14,933	19,083	26,112	31,194	0	
	Panadura (Keselwatta)	496	0	0	6,691	20,974	31,439	40,604	47,935	52,468	55,079	0	
	Kesbawa (Exis. Maharagama)	529-A	0	0	4,604	16,084	26,475	36,932	46,667	50,146	52,065	0	
	Kesbawa (Piliyandala)	542	0	0	7,507	26,226	43,169	58,408	69,388	74,505	78,665	0	
	Kesbawa (from Kalatuwawa)	552	0	0	2,813	9,828	16,178	22,567	28,516	30,642	31,815	0	
	Panadura P.S.	494	0	2,318	2,425	2,534	2,645	2,714	2,815	2,916	3,017	0	
	Total Towns South			0	2,318	27,559	82,635	129,631	191,157	245,114	280,626	304,584	0
	Towns North Area	Wattala South	122	0	0	3,926	35,980	60,178	77,286	91,524	102,341	108,247	0
		Mahara South	132	0	0	0	0	0	2,073	3,860	10,993	16,006	0
		Mahara North	141	0	0	933	7,287	12,217	17,417	21,779	40,289	51,918	0
Ragama		145	0	0	1,507	17,549	28,161	35,360	43,447	46,162	48,878	0	
Weisara, Kandana		156	0	0	2,607	29,193	47,184	58,114	69,764	74,505	78,665	0	
Ja Ela U.C.		161	0	0	2,510	26,385	42,146	53,316	64,797	76,096	84,111	0	
Wattala North		165	0	0	729	8,693	14,213	18,210	22,719	29,897	35,156	0	
Katana P.S. (south)		166	0	0	0	0	0	2,425	4,786	16,684	24,936	0	
Katunayake EPZ		170	0	0	0	0	0	0	0	0	709	0	
Katunayake U.C. North		174	0	0	0	0	0	0	0	0	425	0	
Katana P.S. (north)	183	0	0	0	0	0	0	0	0	12,962	0		
Total Towns North			0	12,212	125,087	204,039	264,201	322,566	410,335	470,228	21,604	0	
Biyagama	Total Towns North		6,000	6,309	6,973	7,678	8,405	9,360	10,347	10,347	10,347	0	
	Biyagama (incl. EPZ)	127	6,000	6,309	6,973	7,678	8,405	9,360	10,347	10,347	10,347	0	
		121	0	0	15,924	29,220	41,583	56,243	69,755	74,561	77,594	0	
Area Far South		132	0	0	3,072	5,636	8,021	13,938	19,146	24,046	27,657	0	
	Total Biyagama		6,000	6,309	25,969	42,534	58,010	79,541	99,248	108,954	115,989	0	
	Silawaka (Padukka Town)	428	0	0	0	0	0	1,437	2,741	3,618	4,386	0	
	Bandaragama P.S. (West)	494	0	0	0	0	0	3,641	6,800	12,745	17,162	0	
	Bandaragama P.S. (East)	497	0	0	0	2,908	5,546	9,021	12,526	15,923	17,837	0	
Horana P.S.	1000	0	0	0	0	0	0	0	0	7,217	0		
Total of Area Far South			6,000	43,694	158,822	410,412	613,461	827,885	1,027,967	1,204,219	1,325,866	0	
Total of New Area			6,000	43,694	158,822	410,412	613,461	827,885	1,027,967	1,204,219	1,325,866	0	
Total Served Population of Existing Area			1,371,174	1,561,666	1,641,419	1,690,909	1,737,362	1,762,251	1,783,205	1,811,605	1,832,890	0	
Total Served Population			1,377,174	1,605,360	1,800,240	2,101,321	2,350,823	2,590,136	2,811,172	3,015,824	3,158,776	0	

Population Allocation (Existing Service Area) Existing Service Area (Served Population - Development with Kalu Ganga)

Progress Percentage to
Full Development Demand

Area	1990	1995	2000	2005	2010	2015	2020	2025	2030
Colombo M.C.	90<	100	100	100	100	100	100	100	100
Dehiwela-Mt.Lavinia M.	90<	100	100	100	100	100	100	100	100
Kotte U.C.	90<	100	100	100	100	100	100	100	100
Kolonnawa U.C.	90<	100	100	100	100	100	100	100	100
Moratuwa U.C.	72	81	85	87	90	90	90	90	95
Kott/Mulleriyawa P.S.	35	60	75	90	95	95	95	100	100
Peiyagoda U.C.	45	60	70	80	85	88	90	90	95
Wattala Mabole U.C.	41	60	70	80	85	88	90	90	95
Kelaniya P.S.	45	60	70	80	85	88	90	90	95
Panadura U.C.	90<	100	100	100	100	100	100	100	100
Horana U.C.	65	75	82	86	88	90	90	90	90

	Full Development Population										
	1990	1995	2000	2005	2010	2015	2020	2025	2030		
1 Colombo M.C.	729,491	746,757	760,000	765,350	770,700	773,550	776,400	776,400	776,400		
2 Dehiwela-Mt.Lavinia M.C.	204,172	224,441	242,400	243,000	243,600	243,750	243,900	243,900	243,900		
3 Kotte U.C.	106,590	131,483	141,400	146,700	152,000	156,450	160,900	160,900	160,900		
4 Kolonnawa U.C.	51,183	55,720	59,600	59,800	60,000	60,050	60,100	60,100	60,100		
5 Moratuwa U.C.	131,560	160,953	191,100	193,300	195,500	199,200	202,900	202,900	202,900		
6 Kott/Mulleriyawa P.S.	30,158	61,908	98,500	101,500	104,500	107,400	110,300	110,300	110,300		
7 Peiyagoda U.C.	15,000	26,208	36,800	36,900	37,000	37,150	37,300	37,300	37,300		
8 Wattala Mabole U.C.	11,000	19,563	28,900	29,450	30,000	30,800	31,600	31,600	31,600		
9 Kelaniya P.S.	49,000	87,650	132,300	140,700	149,100	151,500	153,900	153,900	153,900		
10 Panadura U.C.	36,000	37,000	38,600	38,600	38,600	38,950	39,300	39,300	39,300		
11 Horana U.C.	7,020	9,983	13,200	14,300	15,400	16,750	18,100	18,100	18,100		
Grand Total	1,371,174	1,561,666	1,742,800	1,769,600	1,796,400	1,815,550	1,834,700	1,834,700	1,834,700		

	Served Population										
	1990	1995	2000	2005	2010	2015	2020	2025	2030		
1 Colombo M.C.	729,491	746,757	760,000	765,350	770,700	773,550	775,800	776,400	776,400		
2 Dehiwela-Mt.Lavinia M.C.	204,172	224,441	242,400	243,000	243,600	243,750	243,900	243,900	243,900		
3 Kotte U.C.	106,590	131,483	141,400	146,700	152,000	156,450	160,900	160,900	160,900		
4 Kolonnawa U.C.	51,183	55,720	59,600	59,800	60,000	60,050	60,100	60,100	60,100		
5 Moratuwa U.C.	131,560	160,953	162,435	168,171	175,950	179,280	182,610	182,755	202,900		
6 Kott/Mulleriyawa P.S.	30,158	61,908	76,629	91,350	99,275	102,030	104,785	110,300	110,300		
7 Peiyagoda U.C.	15,000	26,208	27,864	29,520	31,450	32,692	33,570	35,435	37,300		
8 Wattala Mabole U.C.	11,000	19,563	21,562	23,560	25,500	27,104	28,440	30,020	31,600		
9 Kelaniya P.S.	49,000	87,650	100,105	112,560	126,735	133,320	137,510	146,205	153,900		
10 Panadura U.C.	36,000	37,000	38,600	38,600	38,600	39,300	39,300	39,300	39,300		
11 Horana U.C.	7,020	9,983	10,824	12,298	13,552	15,075	16,290	16,290	16,290		
Total	1,371,174	1,561,666	1,641,419	1,690,909	1,737,362	1,762,251	1,783,205	1,811,605	1,832,890		

Population Allocation from PS Level to GS Division Level (1)

New Service Area (Served Population - Development with Kalu Ganga)

Towns East Project area (Priority 1) to be Commissioned in 1996.

Future Expansion area (Priority 2) to be commissioned in 2010 or later. (as Low Development Area)

Non-Priority area not to be commissioned before 2020.

Progress Percentage to Full Development Demand

Year	1995	2000	2005	2010	2015	2020	2025	2030
Priority 1	0%	25%	47%	62%	73%	81%	85%	88%
Priority 2				0%	15%	25%	33%	40%
Non Priority					0%	15%	25%	

Pradeshya Sathya	Sub Division	Priority	Full Development Population										Node No	Served Population							Total Population by Node												
			1990	1995	2000	2005	2010	2015	2020	2025	2030	1995		2000	2005	2010	2015	2020	2025	2030	1995	2000	2005	2010	2015	2020	2025	2030					
Kaduwela P.S.	1 Nawsomawa*	2	3,808	2,856	3,691	4,482	5,416	6,386	7,391	8,430	9,430	8,430	281	0	0	0	1,109	2,108	2,782	3,372													
	2 Ihala Bomniya*	2	4,939	3,705	4,788	5,613	7,026	8,284	9,587	10,936	10,936	10,936	281	0	0	0	1,435	2,734	3,609	4,374													
	3 Ranaia*		2,264	1,698	2,195	2,665	3,221	3,797	4,395	5,013	5,013	281	0	0	0	0	0	0	752	1,253													
	4 Pahala Bomniya*		4,425	3,319	4,290	5,208	6,295	7,422	8,589	9,797	9,797	281	0	0	0	0	0	0	1,470	2,449													
	5 Hewagama*	1	6,174	4,631	5,985	7,267	8,762	10,355	11,984	13,670	13,670	281	0	1,817	4,128	6,420	8,748	11,073	11,619	12,029													
	6 Kotawala*	1	5,454	4,090	5,287	6,419	7,757	9,146	10,585	12,074	12,074	281	0	1,605	3,646	5,671	7,727	9,780	10,263	10,625													
	7 Welwela*	1	6,483	4,862	6,284	7,630	9,222	10,873	12,583	14,353	14,353	281	0	1,908	4,334	6,741	9,186	11,626	12,200	12,631													
	8 Malawala*	1	9,570	7,178	9,277	11,263	13,613	16,050	18,575	21,188	21,188	281	0	2,816	6,398	9,951	13,560	17,162	18,010	18,646													
	9 Pore (Part North)		3,859	2,894	3,741	4,542	5,489	6,472	7,490	8,544	8,544	281	0	0	0	0	0	0	1,282	2,136													
	10 Doddagama*		6,096	4,572	5,909	7,175	8,671	10,224	11,832	13,497	13,497	281	0	0	0	0	0	0	3,021	5,034													
	11 Onwala/Korakola		9,086	6,822	8,817	10,705	12,938	15,254	17,654	20,137	20,137	281	0	0	0	0	0	0	0	3,021													
	12 Aluugriya		10,331	7,749	10,015	12,159	14,685	17,327	20,053	22,873	22,873	498	0	0	0	0	0	0	3,431	5,716													
	13 Pore (Part South)		3,859	2,894	3,741	4,542	5,489	6,472	7,490	8,544	8,544	498	0	0	0	0	0	0	1,282	2,136													
	14 Talahena*	1	4,373	3,260	4,238	5,147	6,220	7,334	8,488	9,682	9,682	563	0	1,267	2,924	4,547	6,196	7,842	8,230	8,520													
	15 Talangama S.*	1	19,553	14,664	18,953	23,012	27,611	32,791	37,950	43,288	43,288	563	0	5,753	13,071	20,330	27,703	35,064	36,795	38,094													
	16 Talangama N.*	1	17,013	12,760	16,492	20,023	24,200	28,532	33,021	37,687	37,687	563	0	5,006	11,374	17,890	24,106	30,510	32,017	33,147													
	17 Balaragama*	1	24,234	18,176	23,492	28,522	34,471	40,643	47,037	53,654	53,654	563	0	7,130	16,201	25,199	34,337	43,460	45,696	47,215													
	18 Kalapakkawala*	1	9,776	7,332	9,476	11,505	13,905	16,395	18,974	21,643	21,643	563	0	2,876	6,535	10,165	13,851	17,531	18,397	19,046													
	19 Hokandara S.*	2	6,920	5,190	6,708	8,144	9,843	11,606	13,431	15,321	15,321	574	0	0	0	0	2,015	3,830	5,056	6,128													
	20 Hokandara N.*	2	5,171	3,878	5,013	6,086	7,355	8,872	10,637	12,448	12,448	574	0	0	0	0	1,505	2,862	3,778	4,579													
Total of Kaduwela P.S.		163,400	122,550	158,393	192,308	232,420	274,033	317,146	361,760	361,760		0	30,197	68,611	106,714	151,481	195,502	221,622	240,509	0	0	0	0	3,520	6,692	8,834	10,708						
Maharagama P.S.	1 Mediwela (Etds.)	Exds.	12,496	9,372	10,536	11,717	12,378	13,056	13,729	14,416	14,416	528	10,536	11,717	12,378	13,056	13,729	14,416	14,416	14,416	10,536	11,717	12,378	13,056	13,729	14,416	14,416	14,416					
	2 Gangodawala (Etds.)	Exds.	12,778	9,584	10,774	11,992	12,657	13,350	14,039	14,744	14,744	528	10,774	11,982	12,657	13,350	14,039	14,744	14,744	14,744	10,774	11,982	12,657	13,350	14,039	14,744	14,744	14,744					
	3 Udahamulla (Etds.)	Exds.	16,315	12,237	13,768	15,298	16,161	17,045	17,925	18,825	18,825	529	13,758	15,298	16,161	17,046	17,925	18,825	18,825	18,825	24,530	27,280	28,818	30,296	31,964	33,569	35,087	36,569	38,087	39,569	41,087		
	Total (Etds. Area)		41,590	31,192	35,068	38,997	41,196	43,452	45,683	47,987	47,987	35,068	35,068	38,997	41,196	43,452	45,683	47,987	47,987	47,987	35,068	38,997	41,196	43,452	45,683	47,987	47,987	47,987	47,987	47,987	47,987		
	4 Pennipiliya*	1	5,539	4,154	4,670	5,194	5,487	5,787	6,085	6,391	6,391	411	0	1,293	2,579	3,588	4,442	5,177	5,432	5,624	0	1,296	2,579	3,588	4,442	5,177	5,432	5,624					
	5 Madiwela*	1	3,124	2,343	2,634	2,929	3,084	3,264	3,432	3,605	3,605	528	0	732	1,454	2,024	2,506	2,920	3,084	3,172	0	732	1,454	2,024	2,506	2,920	3,084	3,172					
	6 Thalapatipiliya	1	7,661	5,746	6,459	7,184	7,589	8,004	8,417	8,840	8,840	529	0	1,786	3,567	4,963	6,144	7,160	7,514	7,779	0	1,796	3,567	4,963	6,144	7,160	7,514	7,779					
	7 Nawinna*	1	12,067	9,050	10,174	11,315	11,953	12,607	13,258	13,923	13,923	562	0	2,829	5,616	7,817	9,676	11,276	11,835	12,253	0	2,829	5,616	7,817	9,676	11,276	11,835	12,253					
	8 Powwala/Debanama*	1	5,854	4,390	4,936	5,489	5,798	6,116	6,431	6,754	6,754	562	0	1,372	2,725	3,792	4,695	5,471	5,741	5,944	0	1,372	2,725	3,792	4,695	5,471	5,741	5,944					
	9 Pamunuwa*	1	2,973	2,230	2,507	2,788	2,945	3,106	3,266	3,430	3,430	562	0	697	1,394	1,926	2,384	2,779	2,916	3,019	0	697	1,394	1,926	2,384	2,779	2,916	3,019					
	10 Maharagama*	1	19,492	14,610	16,435	18,277	19,307	20,365	21,415	22,490	22,490	562	0	4,569	9,074	12,626	15,633	18,217	19,117	19,792	0	4,569	9,074	12,626	15,633	18,217	19,117	19,792					
	11 Godgamuwa S.*	1	8,508	6,381	7,174	7,978	8,428	8,869	9,348	9,817	9,817	562	0	1,694	3,361	4,642	5,682	6,544	6,844	7,099	0	1,694	3,361	4,642	5,682	6,544	6,844	7,099					
	12 Godgamuwa N.*	1	13,491	10,118	11,375	12,650	13,383	14,095	14,822	15,567	15,567	562	0	3,163	6,281	8,739	10,820	12,609	13,232	13,699	0	3,163	6,281	8,739	10,820	12,609	13,232	13,699					
Total (New Service Area)		78,710	59,033	66,384	73,603	77,584	82,233	86,474	90,818	90,818		18,451	36,643	50,985	63,126	73,562	77,185	79,920	79,920	18,451	36,643	50,985	63,126	73,562	77,185	79,920	79,920	79,920	79,920	79,920			
Total of Maharagama P.S.		120,300	90,225	101,430	112,600	119,160	125,685	132,167	138,805	138,805		35,068	57,448	77,839	94,436	108,619	121,550	125,182	127,307	35,068	57,448	77,839	94,436	108,619	121,550	125,182	127,307 </						

Population Allocation from PS Level to GS Division Level (3)

New Service Area (Served Population - Development with Kalu Ganga)

Towns North Project area (Priority 1-A) to be Commissioned in 1999 (as Urgent Development Area)

Priority 1-B Area to be commissioned in 1999 (as High development area)

Priority 2 Area to be commissioned in 2010 (as High development area)

Non-Priority area not to be commissioned before 2020.

Progress Percentage to
Full Development Demand

Year	1995	2000	2005	2010	2015	2020	2025	2030
Priority 1-A		5%	50%	70%	75%	80%	85%	90%
Priority 1-B		5%	35%	53%	67%	75%	83%	86%
Priority 2				0%	15%	25%	33%	40%
Non-Priority					0%	15%	25%	

Pradesh/ya Sabha	Sub-Division	Priority	Full Development Population								Node No.	Served Population								Total Population by Node										
			1990	1999	2005	2010	2015	2020	2025	2030		1995	2000	2005	2010	2015	2020	2025	2030	1995	2000	2005	2010	2015	2020	2025	2030			
Ja Ela P.S.	1 Watpola		10,368	7,774	8,528	11,278	13,131	15,050	17,838	20,317	20,317	20,317	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	2 Bahuwatta		17,232	12,924	15,841	18,748	21,828	25,020	28,322	33,775	33,775	33,775	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	3 Ragama	1-A	27,708	20,781	25,472	30,148	35,068	40,230	47,147	54,308	54,308	54,308	158	0	1,507	17,549	28,181	35,360	43,447	46,162	48,878	0	1,507	17,549	28,181	35,360	43,447	48,878		
	4 Nagoda	1-A	8,727	6,545	8,023	9,495	11,055	12,871	14,850	17,105	17,105	17,105	158	0	475	5,527	8,870	11,137	13,684	14,539	15,395	0	475	5,527	8,870	11,137	13,684	14,539	15,395	
	5 Rilawala	1-A	5,518	2,838	3,234	3,827	4,456	5,107	5,988	6,895	6,895	6,895	158	0	191	2,228	3,575	4,489	5,516	5,860	6,205	0	191	2,228	3,575	4,489	5,516	6,205		
	6 Kandana	1-A	10,504	7,878	9,857	11,429	13,306	15,251	17,874	20,589	20,589	20,589	158	0	571	6,853	10,676	13,405	16,471	17,900	18,530	0	571	6,853	10,676	13,405	16,471	17,900	18,530	
	7 Nedunpitiya	1-B	6,033	4,524	5,548	6,563	7,641	8,799	10,285	11,824	11,824	11,824	158	0	328	2,675	4,842	6,877	8,288	9,814	10,189	0	328	2,675	4,842	6,877	8,288	9,814	10,189	
	8 Thodella (Part)	1-A	3,528	2,647	3,244	3,840	4,471	5,124	6,005	6,917	6,917	6,917	191	0	182	2,235	3,587	4,504	5,534	5,890	6,228	0	182	2,235	3,587	4,504	5,534	5,890	6,228	
	9 Nwandoma		8,948	6,709	8,224	9,735	11,332	12,989	15,222	17,534	17,534	17,534	191	0	188	2,188	3,511	4,408	5,416	5,755	6,093	0	188	2,188	3,511	4,408	5,416	5,755	6,093	
	10 Kodahakpoda	1-A	3,454	2,591	3,175	3,758	4,376	5,045	5,878	6,770	6,770	6,770	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11 Kurundawela		8,848	6,648	8,185	9,721	11,309	12,969	15,222	17,534	17,534	17,534	191	0	251	2,047	3,553	5,284	6,788	7,512	7,784	0	251	2,047	3,553	5,284	6,788	7,512	7,784	
	12 Kanuvana	1-B	4,618	3,483	4,245	5,024	5,840	6,704	7,657	8,651	8,651	8,651	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	13 Ekola		5,648	4,236	5,192	6,145	7,154	8,200	9,610	11,070	11,070	11,070	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	14 Balagama	1-B	6,755	5,066	6,210	7,350	8,557	9,808	11,485	13,241	13,241	13,241	161	0	397	2,995	5,198	7,701	9,930	10,990	11,387	0	397	2,995	5,198	7,701	9,930	10,990	11,387	
	15 Dandugama	1-A	6,410	4,812	5,898	6,981	8,127	9,316	10,617	12,576	12,576	12,576	165	0	319	4,094	6,521	8,168	10,061	10,689	11,318	0	319	4,094	6,521	8,168	10,061	10,689	11,318	
Total of Ja Ela P.S.		130,100	97,575	119,600	141,548	164,800	188,895	221,375	255,000	255,000	255,000	181	0	4,421	48,181	78,294	101,335	125,715	149,061	165,915	0	4,421	48,181	78,294	101,335	125,715	149,061	165,915		
Ja Ela U.C.		33,000	24,750	27,523	30,237	33,840	37,587	41,917	46,410	46,410	46,410	181	0	1,512	18,820	28,297	37,128	39,449	41,768	0	1,512	18,820	28,297	37,128	39,449	41,768	0			
Kalanuwa P.S. (Part)	1 Alawalpitiya	1-A	2,049	1,537	2,087	2,747	3,551	4,377	5,327	5,727	5,727	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	2 Udammula (Ekala IPZ)	1-A	3,612	2,700	3,619	4,613	5,907	7,011	8,528	10,096	10,096	10,096	185	0	242	2,953	4,988	6,395	8,077	8,582	9,088	0	242	2,953	4,988	6,395	8,077	8,582	9,088	
	3 Amaduwawa	2	2,182	1,644	2,233	2,940	3,559	4,258	5,175	6,128	6,128	6,128	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4 Ganegoda		15,589	11,892	15,877	20,900	25,493	30,259	36,708	43,573	43,573	43,573	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5 Kotugoda		872	729	960	1,304	1,590	1,887	2,295	2,718	2,718	2,718	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6 Kuswala		2,066	1,565	2,125	2,797	3,412	4,050	4,825	5,832	5,832	5,832	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7 Raddoluwa		2,235	1,877	2,277	2,997	3,656	4,339	5,277	6,248	6,248	6,248	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8 Seeduwa		4,657	3,493	4,743	6,244	7,616	9,040	10,993	13,017	13,017	13,017	188	0	0	0	0	1,840	3,254	4,296	5,207	0	0	0	0	0	2,425	4,786	15,074	22,251
	9 Andianbalama		3,418	2,564	3,481	4,583	5,590	6,835	8,069	9,554	9,554	9,554	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10 Dewamottawa		3,280	2,445	3,320	4,371	5,331	6,328	7,685	9,112	9,112	9,112	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11 Heenaliyana		2,142	1,607	2,182	2,872	3,503	4,158	5,057	5,988	5,988	5,988	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12 Kowlana		2,701	2,026	2,751	3,621	4,417	5,243	6,378	7,550	7,550	7,550	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	13 Madawala		2,586	1,939	2,633	3,467	4,218	5,018	6,103	7,227	7,227	7,227	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	14 Theppigoda		6,731	5,048	6,855	9,025	11,068	13,060	15,859	18,815	18,815	18,815	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Total of Kalanuwa P.S. (Part)		47,500	35,625	48,377	63,685	77,680	92,202	112,125	132,770	132,770	132,770	170	0	379	4,629	7,692	12,447	17,445	37,280	51,053	0	379	4,629	7,692	12,447	17,445	37,280	51,053	
Kalanuwa EPZ		0	0	0	0	0	0	0	0	0	0	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Mahara P.S. (Part)	1 Enderawala	1-B	6,095	4,571	5,157	5,810	6,482	7,176	8,093	9,041	9,041	122	0	291	2,269	3,804	5,422	6,780	7,504	7,775	0	291	2,269	3,804	5,422	6,780	7,504	7,775		
	2 Pinnewedda	1-B	10,917	8,188	9,237	10,408	11,611	12,855	14,497	16,194	16,194	16,194	122	0	520	4,064	6,813	9,713	12,145	13,441	13,927	0	520	4,064	6,813	9,713	12,145	13,441	13,927	
	3 Gonchera	2	10,408	7,806	8,807	9,922	11,059	12,255	13,821	15,439	15,439	15,439	132	0	0	0	0	2,073	3,860	5,095	6,176	0	0	0	0	0	0	0		
	4 Kirifawala		8,149	6,111	6,895	7,769	8,667	9,595	10,821	12,087	12,087	12,087	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5 Narawala		5,351	4,013	4,528	5,102	5,691	6,301	7,106	7,938	7,938	7,938	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6 Ukupla		4,447	3,335	3,763	4,240	4,730	5,236	5,905	6,597	6,597	6,597	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7 Weboda		5,582	4,222	4,745	5,313	5,907	6,524	7,176	7,938	7,938	7,938	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8 Ihala Karagahamuna	1-B	12,400	9,330	10,528	11,860	13,231	14,848	16,510	18,453	18,453	18,453	141	0	593	4,831	7,764	11,068	13,840	15,316	15,870	0	593	4,831	7,764	11,068	13,840	15,316	15,870	
	9 Kenda'yayada Paluwa		13,895	10,421	11,757	13,247	14,778	16,381	18,451	20,811	20,811	20,811	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10 Mahara Hagegoda	1-B	7,138	5,352	6,038	6,803	7,589	8,402	9,475	10,555	10,555	10,555	141	0	340	2,655	4,453	6,349	7,939	8,785	9,103	0	340	2,655	4,453	6,349	7,939	8,785	9,103	
	11 Pahala Karagahamuna		7,478	5,608	6,327	7,129	7,953	8,805	9,930	11,092	11,092	11,092	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12 Susiyapalkwa		8,324	6,243	7,043	7,836	8,653	9,601	10,653	12,347	12,347	12,347	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Total of Mahara P.S. (Part)		103,200	77,400	87,323	98,387	109,760	121,520	137,042	153,085	153,085	153,085	170	0	1,744	13,618	22,833	34,625	44,564	62,647	73,993									

Population Allocation from PS Level to GS Division Level (4)

New Service Area (Served Population - Development with Kalu Ganga)

Diyagama Expansion Area (Priority 1) to be Commissioned in 1995

Future Expansion area (Priority 2) to be commissioned in 2010 or later. (as Low Development Area)

Non-Priority area not to be commissioned before 2020.

Progress Percentage to Full Development Demand

Year	1995	2000	2005	2010	2015	2020	2025	2030
Priority 1	0%	30%	50%	65%	75%	82%	86%	88%
Priority 2	0%			0%	15%	25%	33%	40%
Non Priority						0%	15%	25%

Pradeshaya Sabha	Sub Division	Priority	1990 Population	Full Development Population										Node No.	Served Population							Total Population by Node									
				1990	1995	2000	2005	2010	2015	2020	2025	2030	1995		2000	2005	2010	2015	2020	2025	2030	1995	2000	2005	2010	2015	2020	2025	2030		
Biyagama P.S.	1 Biyanwela	2	14,983	11,222	12,618	13,946	15,354	16,808	18,719	20,693	20,693	20,693	121	0	0	0	0	2,808	5,173	6,829	8,277	0	1,492	2,738	3,897	5,007	6,052	6,347	6,495		
	2 Deegala	1	5,337	4,003	4,500	4,974	5,476	5,995	6,677	7,380	7,380	7,380	121	0	2,920	5,358	7,626	9,789	11,843	12,421	12,710	121	0	2,253	4,134	5,884	7,581	8,138	9,584	9,606	
	3 Goanavala	1	10,444	7,833	8,807	9,734	10,717	11,732	13,066	14,443	14,443	14,443	121	0	1,405	2,583	3,670	4,724	5,709	5,987	6,127	121	0	5,133	9,419	13,405	17,225	20,819	21,834	22,342	
	4 Heiyarhudawa	1	8,058	6,044	6,795	7,510	8,289	9,052	10,031	11,144	11,144	11,144	121	0	1,877	3,444	4,902	6,299	7,613	7,984	8,170	121	0	840	1,542	2,195	2,820	3,408	3,575	3,858	
	5 Mabbima	1	5,034	3,776	4,245	4,692	5,168	5,655	6,298	6,982	6,982	6,982	121	0	0	0	0	0	0	0	0	121	0	0	0	0	0	0	0	0	
	6 Makola	1	18,359	13,769	15,481	17,111	18,839	20,623	22,867	25,399	25,399	25,399	121	0	0	0	0	0	0	0	0	121	0	0	0	0	0	0	0	0	
	7 Pamunurwala	1	6,713	5,035	5,661	6,257	6,869	7,541	8,399	9,284	9,284	9,284	121	0	0	0	0	0	0	0	0	121	0	0	0	0	0	0	0	0	
	8 Pattiwela	1	3,006	2,254	2,535	2,801	3,084	3,376	3,760	4,157	4,157	4,157	121	0	0	0	0	0	0	0	0	121	0	0	0	0	0	0	0	0	0
	9 Biyagama (incl. IPZ)	Exps.	7,482	5,811	6,309	6,973	7,678	8,405	9,350	10,347	10,347	10,347	127	6,309	6,973	7,678	8,405	9,350	10,347	10,347	10,347	127	6,309	6,973	7,678	8,405	9,350	10,347	10,347	10,347	10,347
	10 Alhasuma		2,035	1,528	1,716	1,897	2,088	2,286	2,546	2,814	2,814	2,814	132	0	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0
	11 Delgoda		1,218	912	1,026	1,134	1,248	1,366	1,522	1,682	1,682	1,682	132	0	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0
	12 Kamahevela		1,624	1,218	1,369	1,513	1,668	1,824	2,031	2,245	2,245	2,245	132	0	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0
	13 Katuboda		3,018	2,264	2,545	2,813	3,097	3,391	3,776	4,174	4,174	4,174	132	0	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0
	14 Mawaramandya	2	6,107	4,581	5,150	5,692	6,267	6,861	7,441	8,446	8,446	8,446	132	0	0	0	0	1,146	2,112	2,787	3,378	132	0	0	0	0	0	0	0	0	0
	15 Meegahawatta	2	5,374	4,031	4,532	5,009	5,515	6,037	6,573	7,432	7,432	7,432	132	0	0	0	0	1,008	1,858	2,453	2,973	132	0	0	0	0	0	0	0	0	0
	16 Siyamabale	2	7,684	5,898	6,631	7,329	8,069	8,833	9,838	10,875	10,875	10,875	132	0	0	0	0	1,478	2,719	3,589	4,350	132	0	0	0	0	0	0	0	0	0
	17 Waligama	1	10,886	8,239	9,264	10,239	11,273	12,341	13,743	15,192	15,192	15,192	132	0	3,072	5,636	8,021	10,368	12,458	13,955	13,959	132	0	3,072	5,636	8,021	10,368	12,458	13,955	13,959	
	18 Yabarakuwa		2,481	1,881	2,092	2,312	2,546	2,787	3,104	3,431	3,431	3,431	132	0	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0
Grand Total	Total of Biyagama P.S.		120,100	90,075	101,277	111,938	123,240	134,913	150,250	168,090	168,090		6,309	25,989	42,534	58,010	79,541	99,248	108,954	115,589		6,309	25,989	42,534	58,010	79,541	99,248	108,954	115,589		

Population Summary by Node

Node	Total Served Population							
	1995	2000	2005	2010	2015	2020	2025	2030
121	0	15,924	29,220	41,583	56,243	69,755	74,591	77,584
127	6,309	6,973	7,678	8,405	9,360	10,347	10,347	10,347
132	0	3,072	5,636	8,021	13,938	19,148	24,046	27,657
Total	6,309	25,969	42,534	58,010	79,541	99,248	108,954	115,589

Projected Full Development Population

	1990	1995	2000	2005	2010	2015	2020	2025	2030
Biyagama P.S. (excl. IPZ)	90,075	101,277	111,938	123,240	134,913	150,250	168,090	168,090	168,090
Biyagama IPZ only	0	0	0	0	0	0	0	0	0
Total	90,075	101,277	111,938	123,240	134,913	150,250	168,090	168,090	168,090

Area Far-South (Harana P.S., Bandaragama P.S., Padukka Town)

Priority 1 Area (along Ratnapura Road) to be commissioned in 2000 (as Low development area)

Future Expansion area (Priority 2) to be commissioned in 2010 or later. (as Low Development Area)

Progress Percentage to Full Development Demand

Year	1995	2000	2005	2010	2015	2020	2025	2030
Priority 1	0%	15%	25%	33%	40%	45%	47%	
Priority 2				0%	15%	25%	33%	40%
Non Priority						0%	15%	25%

Pradeshaya Sabha	Sub Division	Priority	1990 Population	Full Development Population										Node No.	Served Population							Total Population by Node									
				1990	1995	2000	2005	2010	2015	2020	2025	2030	1995		2000	2005	2010	2015	2020	2025	2030	1995	2000	2005	2010	2015	2020	2025	2030		
Bandaragama P.S. (Part)	1 Abomula	2	6,742	5,058	6,250	7,410	8,607	9,848	11,149	12,494	12,494	494	0	0	0	0	1,672	3,123	4,123	4,988	494	0	0	0	0	0	0	0	0	0	0
	2 Atugoda	2	6,246	4,684	5,791	6,885	7,974	9,124	10,329	11,574	11,574	494	0	0	0	0	0	0	0	1,735	2,894	494	0	0	0	0	0	0	0	0	0
	3 Mahabellana	3	2,981	2,221	2,745	3,254	3,780	4,325	4,899	5,497	5,497	494	0	0	0	0	0	0	0	823	1,372	494	0	0	0	0	0	0	0	0	0
	4 Mahawala	2	4,485	3,364	4,158	4,930	5,728	6,552	7,417	8,312	8,312	494	0	0	0	0	1,113	2,078	2,743	3,325	494	0	0	0	0	0	0	0	0	0	0
	5 Pamunurwala	2	4,355	3,288	4,037	4,789	5,560	6,361	7,201	8,070	8,070	494	0	0	0	0	0	0	0	1,210	2,017	494	0	0	0	0	0	0	0	0	0
	6 Pinwala	2	3,450	2,587	3,168	3,791	4,404	5,039	5,705	6,393	6,393	494	0	0	0	0	856	1,598	2,110	2,557	494	0	0	0	0	0	3,941	6,800	12,745	17,182	
	7 Aluugama/Bamunurwala	1	10,889	8,167	10,096	11,988	13,903	15,907	18,008	20,180	20,180	497	0	0	2,085	3,977	5,843	8,072	9,831	9,485	497	0	0	0	0	0	0	0	0	0	0
	8 Bandaragama	1	4,296	3,222	3,983	4,722	5,485	6,276	7,105	7,982	7,982	497	0	0	823	1,509	2,345	3,185	3,583	3,742	497	0	0	0	0	0	0	0	0	0	0
	9 Panape	1	1,808	1,355	1,675	1,995	2,309	2,639	2,987	3,348	3,348	497	0	0	0	0	0	0	0	502	837	497	0	0	0	0	0	0	0	0	0
	10 Rondukkana	2	2,658	2,217	2,740	3,249	3,774	4,318	4,888	5,478	5,478	497	0	0	0	0	733	1,369	1,808	2,191	497	0	0	0	0	0	0	0	0	0	0
	11 Wewila	1	3,414	2,581	3,166	3,753	4,359	4,988	5,647	6,328	6,328	497	0	0	0	0	0	0	0	949	1,582	497	0	0	0	0	0	0	0	0	0
Total of Bandaragama P.S. (Part)		51,900	38,700	47,840	56,713	65,890	75,378	85,333	95,825																						

CHAPTER 4

Ref. No. 4.3

Subject : Water Demand Projection

Title : Projection of Connected Demand

Contents : Allocation of Connected Demand to GS Level

**Total Demand Allocation
New Service Area (Connected Demand - Development with Kalu Ganga)
Revised Demand**

Service Area Category	Division	Node No.	Connected Water Demand (m3/d)										
			1990	1995	2000	2005	2010	2015	2020	2025	2030		
Towns East Area	Kadiwela	281	0	0	1,775	4,138	6,630	9,985	13,546	16,566	18,877	0	
	Panagoda	402	0	0	0	0	0	0	0	0	0	0	
	Pannipitiya	411	0	0	1,733	3,657	5,366	6,859	8,231	8,637	8,942	0	
	Madiwela/Kotte	528	0	1,905	2,949	2,722	3,097	3,501	3,926	3,958	3,983	0	
	Madiwela/Kotte	529	0	4,435	6,374	6,374	7,263	8,218	9,222	9,303	9,363	0	
	Maharagama	552	0	0	2,759	5,716	10,790	13,854	13,202	13,854	14,343	0	
	Batta. (High Zone)	563	0	0	4,180	9,743	15,609	22,075	29,058	30,493	31,570	0	
	Batta. (Low Zone)	568	0	0	627	1,461	2,341	3,311	4,359	4,574	4,735	0	
	Batta/Remote Zone	574	0	0	480	1,015	1,499	2,744	3,940	4,584	5,135	0	
	Total Towns East			0	6,340	19,387	34,827	67,483	85,484	92,070	96,947	0	
	Towns South Area	Hornagama	496	0	0	1,273	2,695	3,979	6,270	8,231	10,402	12,020	0
		Panadura (Keseiwatte)	496	0	0	1,214	3,959	6,181	8,353	10,326	11,302	11,864	0
		Kesbewa (Ekkis, Maharagama)	529-A	0	0	907	3,377	5,888	8,701	11,612	12,478	12,956	0
Kesbewa (Piliyandala)		542	0	0	1,479	5,507	9,600	16,117	22,741	26,619	29,296	0	
Kesbewa (from Kalatuwawa)		552	0	0	2,054	3,598	5,317	7,096	7,625	7,917	0		
Panadura P.S.		494	0	403	440	478	520	1,587	2,483	3,077	3,597	0	
Total Towns South				0	403	5,866	18,061	29,765	46,344	62,488	71,503	0	
Towns North Area		Wattala South	122	0	0	748	6,937	11,995	16,311	20,353	22,736	24,004	0
		Mahara South	132	0	0	0	0	0	612	1,163	3,312	4,822	0
		Mahara North	141	0	0	260	2,068	3,547	5,138	6,562	11,414	14,445	0
	Ragama	145	0	0	325	3,823	6,239	7,957	10,015	10,641	11,266	0	
	Weirisara, Kandana	156	0	0	513	5,821	9,643	12,312	15,355	16,405	17,319	0	
	Ja Ela U.C.	161	0	0	492	5,325	8,848	11,636	14,717	17,307	19,141	0	
	Wattala North	165	0	0	256	2,900	4,594	5,822	6,970	8,568	9,778	0	
	Katana P.S. (south)	166	0	0	0	0	0	929	1,759	5,909	8,793	0	
	Kalunayake EPZ	170	0	0	0	0	0	7,280	7,280	7,280	7,280	0	
	Katana P.S. (north)	183	0	0	0	0	0	0	0	0	163	0	
Total Towns North			0	2,594	26,876	44,868	67,856	84,173	107,851	123,980	0		
Biyagama	Biyagama (incl. EPZ)	127	6,000	7,210	9,979	12,745	15,532	15,832	16,165	16,165	16,165	0	
		121	0	0	3,263	6,262	9,312	13,113	16,953	18,121	18,866	0	
		132	0	0	629	1,208	1,796	3,250	4,653	5,844	6,722	0	
Area Far South	Total Biyagama		6,000	7,210	13,871	20,215	26,641	32,195	37,771	40,130	41,742	0	
	Sitawaka (Padukka Town)	428	0	0	0	0	0	413	813	1,073	1,307	0	
	Bandaragama P.S. (West)	494	0	0	0	0	0	944	1,823	3,416	4,600	0	
	Bandaragama P.S. (East)	497	0	0	0	714	1,394	2,338	3,365	4,268	4,781	0	
	Horana P.S.	1000	0	0	0	0	0	0	0	1,975	3,292	0	
Total of Area Far South			0	0	0	714	1,394	3,695	6,020	10,733	19,974	0	
Total of New Area			6,000	13,952	41,719	100,712	152,781	217,572	275,936	322,286	354,293	0	
Total of Existing Area Demand			343,163	415,927	443,676	483,650	531,927	549,829	566,436	575,674	581,675	0	
Total Day Average Demand (m3/d)			349,163	429,879	485,395	584,362	684,718	767,401	842,372	897,961	935,968	0	
Total Daily Peak Demand Treatment Plant Capacity			401,537	494,361	558,204	672,016	787,426	882,511	968,727	1,032,655	1,076,363	0	
Required => Additional Source	Ambattele (Old)	63 mgd	286,700	286,700	286,700	286,700	286,700	286,700	286,700	286,700	286,700	0	
	Ambattele (New)	40 mgd	182,000	182,000	182,000	182,000	182,000	182,000	182,000	182,000	182,000	0	
	Kalatuwawa (Max. x 90%)	18 mgd	81,900	81,900	81,900	81,900	81,900	81,900	81,900	81,900	81,900	0	
	Labugama (Max. x 90%)	11.75 mgd	53,200	53,200	53,200	53,200	53,200	53,200	53,200	53,200	53,200	0	
	Horana	0.33 mgd	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	0	
Required => Additional Source			0	0	0	66,800	182,000	277,000	364,000	427,000	471,000	0	
Total Capacity			605,300	605,300	605,300	672,100	787,300	882,300	969,300	1,032,300	1,076,300	0	

Demand Allocation (Existing Service Area) Existing Service Area (Connected Demand - Development with Kalu Ganga)

Progress Percentage to
Full Development Demand

Area	1990	1995	2000	2005	2010	2015	2020	2025	2030
Colombo M.C.	90<	100	100	100	100	100	100	100	100
Dehiwela-Mt.Lavinia M.C.	90<	100	100	100	100	100	100	100	100
Kotte U.C.	90<	100	100	100	100	100	100	100	100
Kolonnawa U.C.	90<	100	100	100	100	100	100	100	100
Moratuwa U.C.	72	81	85	87	87	90	90	90	95
Kott/Mulleriyawa P.S.	35	60	75	90	95	95	95	100	100
Peliyagoda U.C.	45	60	70	80	85	88	88	90	95
Wattala Mabile U.C.	41	60	70	80	85	88	88	90	95
Kelaniya P.S.	45	60	70	80	85	88	88	90	95
Panadura U.C.	90<	100	100	100	100	100	100	100	100
Horana U.C.	65	75	82	86	88	90	90	90	90

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Service Area	1995	2000	2005	2010	2015	2020	2025	2030
1 Colombo M.C.	220,605	230,585	249,467	269,528	273,635	278,181	278,181	278,181
2 Dehiwela-Mt.Lavinia M.C.	54,972	60,133	63,302	66,609	67,822	69,084	69,084	69,084
3 Kotte U.C.	35,414	37,668	41,780	46,014	48,644	51,215	51,215	51,215
4 Kolonnawa U.C.	9,846	11,115	12,626	14,250	15,469	16,720	16,720	16,720
5 Moratuwa U.C.	30,240	36,281	39,750	43,453	46,085	48,844	48,844	48,844
6 Kott/Mulleriyawa P.S.	18,198	24,182	26,556	29,177	30,888	32,754	32,754	32,754
7 Peliyagoda U.C.	8,410	10,261	10,744	11,248	11,423	11,610	11,610	11,610
8 Wattala Mabile U.C.	5,866	8,080	9,138	10,223	11,040	11,840	11,840	11,840
9 Kelaniya P.S.	23,576	33,243	39,070	45,210	46,416	47,718	47,718	47,718
10 Panadura U.C.	6,540	7,407	7,969	8,562	8,970	9,395	9,395	9,395
11 Horana U.C.	2,261	2,895	3,329	3,818	4,284	4,793	4,793	4,793
Grand Total	475,927	461,849	503,730	548,192	564,675	582,154	582,154	582,154

Service Area	1995	2000	2005	2010	2015	2020	2025	2030
1 Colombo M.C.	220,605	230,585	249,467	269,528	273,635	277,581	278,181	278,181
2 Dehiwela-Mt.Lavinia M.C.	54,972	60,133	63,302	66,609	67,822	69,084	69,084	69,084
3 Kotte U.C.	35,414	37,668	41,780	46,014	48,644	51,215	51,215	51,215
4 Kolonnawa U.C.	9,846	11,115	12,626	14,250	15,469	16,720	16,720	16,720
5 Moratuwa U.C.	30,240	30,839	34,583	39,108	41,477	43,969	46,401	48,844
6 Kott/Mulleriyawa P.S.	18,198	21,049	23,900	27,719	29,343	31,115	32,754	32,754
7 Peliyagoda U.C.	8,410	8,503	8,595	9,561	10,053	10,449	11,030	11,610
8 Wattala Mabile U.C.	5,866	6,588	7,310	8,690	9,715	10,656	11,248	11,840
9 Kelaniya P.S.	23,576	27,416	31,256	38,429	40,846	41,946	45,332	47,718
10 Panadura U.C.	6,540	7,407	7,969	8,562	8,970	9,395	9,395	9,395
11 Horana U.C.	2,261	2,374	2,863	3,360	3,856	4,314	4,314	4,314
Total	475,927	443,676	483,650	531,927	549,829	566,436	575,674	581,675

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Demand Allocation from PS Level to GS Division Level (1)
 New Service Area (Connected Demand - Development with Kalu Ganga)
 Towns East Project area (Priority 1) to be Commissioned in 1996.
 Future Expansion area (Priority 2) to be commissioned in 2010 or later. (as Low Development Area)
 Non-Priority area not to be commissioned before 2020.

Progress Percentage to
 Full Development Demand

Year	1995	2000	2005	2010	2015	2020	2025	2030
Priority 1	0%	25%	47%	62%	73%	81%	85%	88%
Priority 2				0%	15%	25%	33%	40%
Non Priority						0%	15%	25%

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Pradeshiya Sabha	Sub Division	Priority	1990 Population	Full Development Water Demand (m ³ /d)									Node No.	Connected Water Demand (m ³ /d)						Total Day Average Demand by Node (m ³ /d)										
				1990	1995	2000	2005	2010	2015	2020	2025	2030		1995	2000	2005	2010	2015	2020	2025	2030									
Kaduwela P.S.	1 Nawagamulla*	2	3,808	561	757	977	1,211	1,471	1,767	2,036	2,298	2,596	281	0	0	0	265	524	692	838	0	0	0	0	0	0	0			
	2 Ihala Bomiya*	2	4,939	728	982	1,287	1,571	1,908	2,292	2,719	3,190	3,719	281	0	0	0	344	680	897	1,088	0	0	0	0	0	0	0			
	3 Renale*	2	2,264	334	450	581	720	875	1,051	1,248	1,466	1,718	281	0	0	0	0	0	187	312	0	0	0	0	0	0	0			
	4 Pahala Bomiya*	2	4,425	652	880	1,135	1,407	1,709	2,053	2,436	2,863	3,339	281	0	0	0	0	0	365	609	0	0	0	0	0	0	0			
	5 Hewagama*	1	6,174	910	1,227	1,584	1,964	2,385	2,865	3,399	3,999	4,774	281	0	396	923	1,479	2,091	2,753	3,589	2,991	0	0	0	0	0	0	0		
	6 Kotalawala*	1	5,454	804	1,084	1,399	1,735	2,107	2,530	3,002	3,526	4,114	281	0	350	815	1,306	1,847	2,432	3,062	2,642	0	0	0	0	0	0	0		
	7 Welwela*	1	6,463	955	1,289	1,663	2,062	2,504	3,008	3,569	4,183	4,863	281	0	416	969	1,553	2,196	2,891	3,633	3,140	0	0	0	0	0	0	0		
	8 Malamba*	1	9,570	1,410	1,902	2,455	3,044	3,697	4,411	5,268	6,179	7,158	281	0	614	1,431	2,292	3,242	4,267	5,383	4,636	0	0	0	0	0	0	0		
	9 Pore (Part North)		3,859	569	767	990	1,227	1,491	1,791	2,124	2,424	2,814	281	0	0	0	0	0	0	319	531	0	0	0	0	0	0	0		
	10 Deegamulla		6,096	898	1,212	1,564	1,939	2,355	2,829	3,358	3,952	4,611	281	0	0	0	0	0	0	503	839	0	0	0	0	0	0	0		
	11 Oruwala/Korakota		9,096	1,340	1,808	2,333	2,893	3,514	4,220	5,007	5,907	6,907	281	0	0	0	0	0	0	751	1,252	0	1,775	4,138	6,630	9,985	13,546	16,666	18,677	
	12 Arugiyiya		10,331	1,522	2,054	2,650	3,286	3,991	4,794	5,687	6,687	7,794	488	0	0	0	0	0	0	653	1,422	0	0	0	0	0	1,172	1,953		
	13 Pore (Part South)		3,859	569	767	990	1,227	1,491	1,791	2,124	2,424	2,814	281	0	0	0	0	0	0	319	531	0	0	0	0	0	0	0		
	14 Talagana S.*	1	4,373	644	869	1,122	1,391	1,689	2,029	2,407	2,826	3,296	583	0	260	654	1,047	1,481	1,950	2,466	2,118	0	0	0	0	0	0	0		
	15 Talagana S.*	1	19,559	2,881	3,887	5,016	6,219	7,553	9,027	10,763	12,783	15,103	583	0	1,254	2,623	4,083	5,623	7,248	8,948	10,791	0	0	0	0	0	0	1,172	1,953	
	16 Talagana N.*	1	17,013	2,507	3,382	4,364	5,411	6,572	7,894	9,365	11,015	12,863	583	0	1,091	2,543	4,075	5,763	7,586	9,560	8,241	0	0	0	0	0	0	0	0	
	17 Battaramulla*	1	24,234	3,571	4,817	6,217	7,708	9,362	11,245	13,340	15,640	18,246	583	0	1,554	3,623	5,804	8,209	10,805	13,339	11,739	0	4,180	9,743	15,609	22,075	29,058	30,493	31,570	
	18 Kotte/Kalu*	1	9,776	1,440	1,943	2,508	3,109	3,776	4,536	5,381	6,311	7,331	588	0	627	1,461	2,341	3,311	4,359	5,474	4,735	0	627	1,461	2,341	3,311	4,359	5,474	4,735	
	19 Hokandara S.	2	6,920	1,020	1,376	1,775	2,201	2,673	3,211	3,809	4,468	5,196	574	0	0	0	0	482	952	1,257	1,524	0	0	0	0	0	0	0	0	0
	20 Hokandara N.	2	5,171	762	1,028	1,326	1,645	1,999	2,399	2,846	3,346	3,901	574	0	0	0	0	360	712	939	1,138	0	0	0	0	0	0	0	0	
Total of Kaduwela P.S.		183,400	24,077	32,460	41,916	51,971	63,120	75,616	89,943	106,943	126,843		6,340	6,582	15,342	24,580	36,213	49,627	55,101	59,797	0	6,582	15,342	24,580	36,213	49,627	55,101	59,797		
Maharagama P.S.	1 Madawela (Exis.)	Exis.	12,486	1,866	2,505	3,210	3,936	4,700	5,508	6,359	7,259	528	1,905	2,210	2,738	3,282	3,855	4,468	5,120	5,812	1,905	2,210	2,738	3,282	3,855	4,468	5,120	5,812		
	2 Gangodawala (Exis.)	Exis.	12,778	1,724	2,348	2,990	3,672	4,394	5,156	5,918	6,719	7,560	529	1,948	2,260	2,491	2,742	3,027	3,339	3,681	1,948	2,260	2,491	2,742	3,027	3,339	3,681	4,029		
	3 Udahawala (Exis.)	Exis.	16,315	2,201	2,987	3,866	4,847	5,924	7,100	8,375	9,749	11,224	529	2,487	2,886	3,181	3,501	3,865	4,263	4,694	2,487	2,886	3,181	3,501	3,865	4,263	4,694	5,156		
	Total (Existing Area)		41,580	5,810	8,340	11,173	14,129	17,124	20,262	23,662	27,342	31,333		6,340	7,357	8,103	8,925	9,854	10,886	11,920	6,340	7,357	8,103	8,925	9,854	10,886	11,920	13,066		
	4 Panipitiya*	1	5,539	747	1,004	1,286	1,592	1,924	2,281	2,664	3,074	3,511	411	0	245	598	957	1,326	1,720	2,140	0	245	598	957	1,326	1,720	2,140	2,574		
	5 Madawela*	1	3,124	421	566	726	899	1,084	1,282	1,494	1,721	1,965	411	0	138	286	416	561	718	884	0	138	286	416	561	718	884	1,029		
	6 Thalapatipitiya*	1	7,663	1,033	1,368	1,765	2,216	2,719	3,274	3,881	4,540	5,251	411	0	339	702	1,019	1,325	1,621	1,907	0	339	702	1,019	1,325	1,621	1,907	2,289		
	7 Nawinna*	1	12,067	1,628	2,140	2,755	3,474	4,297	5,229	6,274	7,431	8,701	411	0	534	1,106	1,606	2,087	2,554	3,008	0	534	1,106	1,606	2,087	2,554	3,008	3,462		
	8 Pottawala/Depanama*	1	5,854	790	1,052	1,334	1,637	1,964	2,315	2,690	3,089	3,512	411	0	259	536	779	1,012	1,239	1,461	0	259	536	779	1,012	1,239	1,461	1,681		
	9 Panuwala*	1	2,973	401	533	684	856	1,039	1,234	1,441	1,660	1,894	411	0	131	272	396	514	629	756	0	131	272	396	514	629	756	894		
	10 Maharagama*	1	19,492	2,629	3,491	4,481	5,592	6,834	8,208	9,724	11,384	13,189	411	0	862	1,786	2,593	3,371	4,125	4,868	0	862	1,786	2,593	3,371	4,125	4,868	5,611		
	11 Godigamulla S.*	1	8,508	1,148	1,527	1,936	2,385	2,874	3,403	3,972	4,581	5,220	411	0	376	760	1,132	1,472	1,801	2,119	0	376	760	1,132	1,472	1,801	2,119	2,437		
	12 Godigamulla N.*	1	13,491	1,820	2,407	3,036	3,706	4,417	5,169	5,962	6,797	7,724	411	0	597	1,236	1,795	2,333	2,855	3,362	0	597	1,236	1,795	2,333	2,855	3,362	3,924		
	Total (New Service Area)		78,710	10,618	14,999	19,923	25,345	31,370	38,021	45,442	53,661	62,584		3,481	7,212	10,473	13,613	16,657	17,480	16,097	0	3,481	7,212	10,473	13,613	16,657	17,480	16,097		
Total of Maharagama P.S.		120,590	16,228	21,839	28,156	35,533	43,834	53,044	63,585	75,127	88,133		6,340	10,839	15,320	19,398	23,467	27,523	28,346	6,340	10,839	15,320	19,398	23,467	27,523	28,346	28,963			
Homagama P.S.	1 Panagoda East*	1	3,568	499	652	811	978	1,154	1,339	1,534	1,739	402	0	0	0	0	0	0	288	443	0	0	0	0	0	0	0	0		
	2 Marisepa*	1	2,279	309	408	511	619	741	877	1,024	1,182	411	0	193	409	604	767	917	1,064	0	193	409	604	767	917	1,064	1,211			
	3 Kotlawa*	1	10,399	1,396	1,825	2,302	2,827	3,402	4,027	4,702	5,427	6,202	411	0	882	1,867	2,756	3,499	4,185	4,392	0	882	1,867	2,756	3,499	4,185	4,392	4,547		
	4 Rukmale*	1	3,748	506	668	841	1,024	1,217	1,420	1,633	1,856	411	0	318	673	994	1,261	1,509	1,733	1,936	0	318	673	994	1,261	1,509	1,733	1,936		
	5																													

Demand Allocation from PS Level to GS Division Level (2)
New Service Area (Connected Demand - Development with Kalu Ganga)
Towns South Project area (Priority 1) to be Commissioned in 1998.
Future Expansion area (Priority 2) to be commissioned in 2010 or later. (as Low Development Area)
Non-Priority area not to be commissioned before 2020.

Progress Percentage to
Full Development Demand

Year	1995	2000	2005	2010	2015	2020	2025	2030
Priority 1	0%	13%	39%	56%	69%	78%	84%	87%
Priority 2				0%	15%	25%	33%	40%
Non Priority						0%	15%	25%

Demand Data from File C:\Kalu-fs\Demands\Revised\New_rev.wk4

Pradeshya Sabha	Sub Division	Priority	1990 Population	Full Development Water Demand (m3/d)							Node No	Connected Water Demand (m3/d)						Total Day Average Demand by Node (m3/d)													
				1990	1995	2000	2005	2010	2015	2020		2025	2030	1995	2000	2005	2010	2015	2020	2025	2030	1995	2000	2005	2010	2015	2020	2025	2030		
Kesbewa P.S.	1 Poplyana (Exis.)	1	15,661	2,028	2,533	3,268	3,983	4,838	5,800	6,855	8,085	8,665	528-A	0	417	1,553	2,708	4,002	5,341	6,739	8,997										
	2 Borahyegamwala	1	18,624	2,382	2,975	3,767	4,677	5,678	6,810	8,061	9,481	10,261	529-A	0	490	1,824	3,180	4,693	6,271	7,939	10,317										
	3 Kaluwawala	1	6,681	854	1,067	1,351	1,678	2,037	2,443	2,892	3,382	3,922	542	0	176	654	1,141	1,656	2,250	2,917	3,650		0	907	3,377	5,888	8,701	11,612	12,478	12,956	
	4 Weraheta	1	5,294	677	846	1,071	1,329	1,614	1,936	2,291	2,691	3,131	542	0	139	518	904	1,338	1,783	2,341	2,917										
	5 Balakettara	2	6,548	837	1,048	1,324	1,644	1,996	2,394	2,834	3,314	3,844	542	0	0	0	0	0	0	0	0										
	6 Baluwandara	1	2,421	310	387	490	608	738	885	1,048	1,228	1,428	542	0	0	0	0	0	0	0	0										
	7 Bokundara	1	5,650	722	902	1,143	1,419	1,722	2,066	2,445	2,845	3,285	542	0	149	553	965	1,426	1,902	2,404	2,932										
	8 Dampe	1	2,604	333	416	527	654	794	952	1,127	1,317	1,517	542	0	0	0	0	0	0	0	0										
	9 Detara	1	3,385	433	541	685	850	1,032	1,238	1,465	1,715	1,985	542	0	0	0	0	0	0	0	0										
	10 Gorakpetiya	1	3,446	441	550	697	865	1,051	1,260	1,492	1,747	2,015	542	0	0	0	0	0	169	373	492										
	11 Halpita	2	7,877	1,007	1,258	1,593	1,978	2,402	2,881	3,410	3,990	4,620	542	0	0	0	0	432	852	1,328	1,864										
	12 Hedyama	1	5,852	748	935	1,184	1,470	1,784	2,140	2,533	2,953	3,403	542	0	154	573	999	1,476	1,971	2,499	3,063										
	13 Hovvata	2	5,108	653	816	1,033	1,283	1,557	1,888	2,211	2,581	2,981	542	0	0	0	0	280	553	730	884										
	14 Jumbiretiya	1	2,334	298	373	472	586	712	853	1,010	1,180	1,360	542	0	0	0	0	128	253	333	404										
	15 Kehapota	1	5,360	685	856	1,084	1,346	1,634	1,960	2,320	2,720	3,160	542	0	0	0	0	0	0	0	0										
	16 Kesbewa	1	10,597	1,355	1,692	2,143	2,661	3,251	3,875	4,588	5,388	6,268	542	0	279	1,039	1,809	2,674	3,568	4,492	5,456										
	17 Madepatha	1	5,467	699	873	1,106	1,373	1,687	1,999	2,366	2,766	3,206	542	0	0	0	0	0	0	0	0										
	18 Makendara	2	6,843	875	1,093	1,384	1,710	2,086	2,502	2,962	3,462	3,992	542	0	0	0	0	375	740	977	1,185										
	19 Mahadukwala	1	3,645	468	582	737	915	1,111	1,333	1,578	1,848	2,143	542	0	96	357	622	920	1,227	1,549	1,899										
	20 Mampe	1	10,003	1,279	1,598	2,023	2,512	3,050	3,658	4,330	5,078	5,898	542	0	263	980	1,708	2,524	3,368	4,242	5,156										
	21 Maswara	2	3,020	386	482	611	756	921	1,104	1,307	1,527	1,767	542	0	0	0	0	166	327	431	523										
	22 Maswara	1	4,148	530	663	839	1,042	1,285	1,571	1,795	2,055	2,341	542	0	109	406	708	1,047	1,397	1,501	1,558										
	23 Maswara	1	4,361	558	696	892	1,129	1,399	1,687	1,887	2,117	2,367	542	0	115	427	744	1,100	1,468	1,578	1,638										
	24 Eravala East	1	10,668	1,364	1,704	2,157	2,678	3,252	3,900	4,616	5,392	6,228	542	0	280	1,045	1,821	2,691	3,592	4,539	5,523		0	1,479	5,507	9,600	16,117	22,741	26,619	29,296	
	25 Eravala West	1	4,788	609	761	984	1,197	1,453	1,743	2,063	2,423	2,823	542	0	125	467	814	1,203	1,605	1,725	1,791										
	26 Pelenwala	1	5,640	721	901	1,141	1,416	1,720	2,063	2,441	2,841	3,281	542	0	148	552	953	1,423	1,899	2,401	2,919										
	Total of Kesbewa P.S.		166,200	21,253	26,545	33,618	41,737	50,670	60,774	71,935	84,839	98,639		0	2,940	10,948	19,085	30,135	41,449	46,722	50,169										
	Panadura P.S. (Part)	1 Dhobeda	2	3,929	508	635	805	995	1,205	1,435	1,685	1,955	494	0	0	0	0	114	208	274	333										
2 Kakkawala		2	6,925	892	1,121	1,419	1,781	2,209	2,699	3,259	3,889	494	0	0	0	0	200	366	484	586											
3 Maharuwa		1	6,900	773	973	1,241	1,556	1,926	2,346	2,816	3,336	494	0	0	0	0	174	317	419	508											
4 Pirawala (Exis. Area)		(Exis.)	2,956	381	493	644	820	1,020	1,240	1,480	1,740	494	403	440	478	520	570	625	625	625											
5 Walapola		2	4,239	546	697	893	1,124	1,392	1,697	2,042	2,427	2,942	494	0	0	0	0	123	224	296	359										
6 Welwala		2	14,018	1,806	2,299	2,968	3,809	4,839	6,069	7,499	9,129	10,959	494	0	0	0	0	406	742	979	1,186		403	440	478	520	1,587	2,483	3,077	3,507	
7 Gorakana		1	4,517	582	743	943	1,193	1,488	1,828	2,213	2,643	3,118	494	0	87	285	445	602	744	799	830										
8 Gorakapola		1	6,564	846	1,084	1,389	1,759	2,199	2,699	3,259	3,889	4,589	494	0	127	414	647	874	1,081	1,161	1,206										
9 Hirana/Gallude		1	6,509	839	1,087	1,392	1,752	2,172	2,642	3,162	3,722	4,322	494	0	0	0	0	0	0	207	344										
10 Horeluduwala		1	7,519	969	1,244	1,619	2,044	2,519	3,044	3,619	4,244	4,919	494	0	145	475	741	1,001	1,238	1,330	1,381										
11 Kesewwala		1	11,319	1,458	1,842	2,337	2,942	3,667	4,422	5,207	6,022	6,877	494	0	219	714	1,115	1,507	1,883	2,249	2,609										
12 Kakkawala		1	7,051	908	1,161	1,471	1,831	2,241	2,701	3,201	3,741	4,311	494	0	136	445	655	939	1,161	1,247	1,295										
13 Kakkawala		1	5,161	665	853	1,084	1,359	1,679	2,044	2,454	2,914	3,424	494	0	100	326	509	687	850	913	948										
14 Thotawwala		1	8,409	1,083	1,384	1,764	2,204	2,684	3,204	3,764	4,364	4,994	494	0	163	531	828	1,120	1,384	1,487	1,544										
15 Walana		1	12,185	1,570	1,980	2,510	3,080	3,710	4,390	5,110	5,870	6,710	494	0	236	769	1,201	1,623	2,045	2,155	2,238										
Total of Panadura P.S.		107,300	13,624	17,616	22,704	28,881	36,350	44,420	53,120	63,240	74,000		403	1,653	4,437	6,701	9,939	12,808	14,379	15,461		403	1,214	3,959	6,181	8,353	10,326	11,302	11,864		
Grand Total		273,500	35,077	44,161	56,32																										

