

APPENDIX E: WATER SUPPLY DEMAND ANALYSIS

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Table E-1: Population Served Forecasts by Community

Municipal System	2004	2010	2020	2030	2040	2050
Afton	0	0	0	0	0	0
Andover	17,450	21,188	27,188	28,688	34,551	39,401
Anoka	18,172	19,000	19,800	20,800	21,993	23,331
Apple Valley	49,644	61,700	69,100	71,200	78,584	86,195
Bayport	3,156	4,600	5,300	6,000	7,326	8,454
Baytown Twp.	0	0	0	0	0	0
Belle Plaine	5,002	7,002	11,502	16,002	18,681	21,001
Belle Plaine Twp.	0	0	0	0	0	0
Benton Twp.	0	0	0	0	0	0
Bethel	0	0	0	0	0	0
Blaine	46,845	60,643	71,943	73,843	83,986	94,530
Blakeley Twp.	0	0	0	0	0	0
Bloomington	85,442	87,500	90,500	93,000	93,715	97,883
Brooklyn Center	29,175	29,500	30,500	29,500	29,846	30,367
Brooklyn Park	71,260	74,500	80,500	85,000	95,387	101,235
Burns Twp.	0	0	0	0	0	0
Burnsville	61,355	61,400	63,000	65,000	70,003	71,808
Camden Twp.	0	0	0	0	0	0
Carver	1,950	5,285	16,955	19,485	25,601	27,027
Castle Rock Twp.	0	0	0	0	0	0
Cedar Lake Twp.	0	0	0	0	0	0
Centerville	3,379	3,435	3,835	4,435	5,064	5,720
Champlin	23,000	23,041	23,841	25,141	27,862	29,423
Chanhassen	23,652	27,500	34,500	38,000	45,925	50,655
Chaska	21,000	26,522	32,522	35,222	42,086	46,667
Circle Pines	4,900	5,400	5,300	5,400	5,860	6,125
Coates	0	0	0	0	0	0
Cologne	1,012	2,898	5,338	9,278	10,038	10,762
Columbus Twp.	0	0	0	0	0	0
Coon Rapids	62,295	65,700	66,000	65,000	69,442	70,757
Corcoran	0	5,725	16,000	20,700	28,160	33,450
Cottage Grove	34,800	36,000	45,400	53,000	61,469	70,809
Credit River Twp.	0	0	0	0	0	0
Dahlgren Twp.	0	0	0	0	0	0
Dayton	275	2,459	15,459	24,059	34,784	43,651
Dellwood	0	0	0	0	0	0
Denmark Twp.	0	0	0	0	0	0
Douglas Twp.	0	0	0	0	0	0
Eagan	66,800	67,000	68,000	69,000	73,293	76,227
East Bethel	0	0	0	0	0	0
Eden Prairie	61,000	61,200	62,500	63,000	68,411	71,203
Edina	47,425	49,000	50,000	51,500	51,630	53,666
Elko	408	2,088	5,838	9,638	11,356	13,043
Empire Twp.	1,650	2,325	4,195	6,045	7,042	8,050
Eureka Twp.	0	0	0	0	0	0
Excelsior	2,393	2,453	2,663	2,773	2,922	3,088
Farmington	19,354	20,500	27,100	32,000	38,447	45,117
Forest Lake	11,560	16,460	22,560	28,960	35,390	40,029
Fridley	27,449	27,000	26,900	27,500	28,423	29,040
Gem Lake	0	0	0	0	0	0
Grant	0	0	0	0	0	0
Greenfield	130	500	0	0	2,284	3,052

Table E-1: Population Served Forecasts by Community

Municipal System	2004	2010	2020	2030	2040	2050
Greenville Twp.	0	0	0	0	0	0
Grey Cloud Island Twp.	0	0	0	0	0	0
Ham Lake	0	0	0	0	0	0
Hamburg	560	600	750	1,000	1,169	1,364
Hampton	620	690	730	740	842	928
Hampton Twp.	0	0	0	0	0	0
Hancock Twp.	0	0	0	0	0	0
Hanover (pt.)	0	0	0	0	0	0
Hassan Twp.	0	0	0	0	0	0
Hastings	21,000	23,000	27,500	30,000	35,407	38,740
Helena Twp.	0	0	0	0	0	0
Hollywood Twp.	0	0	0	0	0	0
Hopkins	17,367	17,900	18,600	18,900	19,124	19,737
Hugo	4,758	15,098	24,998	35,998	42,858	49,932
Independence	0	0	0	0	0	0
Inver Grove Heights	30,261	31,968	38,668	42,268	47,739	51,159
Jackson Twp.	0	0	0	0	0	0
Jordan	4,750	7,200	8,300	11,500	14,088	16,753
Lake Elmo	1,992	4,154	12,605	18,202	24,635	31,570
Lakeland	3,454	3,370	3,210	3,160	3,362	3,381
Laketown Twp.	0	0	0	0	0	0
Lakeville	48,500	59,500	78,400	88,800	111,028	121,110
Lexington	2,147	2,250	2,250	2,300	2,474	2,558
Lilydale	0	0	0	0	0	0
Lino Lakes	13,161	16,936	20,736	25,136	30,492	34,956
Linwood Twp.	0	0	0	0	0	0
Long Lake	1,842	2,100	2,250	2,450	2,691	2,937
Loretto	620	690	700	700	766	797
Louisville Twp.	0	0	0	0	0	0
Mahtomedi	7,949	7,904	7,804	7,824	9,792	10,588
Maple Grove	59,200	64,500	75,700	84,000	96,585	109,025
Maple Plain	2,088	2,550	2,570	2,600	2,814	2,930
Marine on St. Croix	0	0	0	0	0	0
Marshan Twp.	0	0	0	0	0	0
May Twp.	0	0	0	0	0	0
Mayer	780	1,940	4,040	6,190	7,224	8,178
Medicine Lake	0	0	0	0	0	0
Medina	2,604	3,754	7,154	10,654	13,317	15,855
Miesville	0	0	0	0	0	0
Minneapolis	466,283	489,670	512,970	527,470	544,200	568,312
Minnnetonka	51,658	51,690	51,720	53,700	55,817	57,910
Minnnetonka Beach	614	640	660	660	672	679
Minnetrista	1,435	1,785	5,585	9,485	11,519	13,820
Mound	9,243	9,903	10,503	10,903	11,441	12,082
Mounds View	12,738	12,900	13,000	13,400	14,549	14,908
New Brighton	22,260	22,700	22,500	22,800	23,349	24,096
New Germany	346	420	570	830	1,029	1,216
New Market	1,121	2,830	6,480	10,380	12,597	14,813
New Market Twp.	0	0	0	0	0	0
New Scandia Twp.	0	0	0	0	0	0
New Trier	110	120	120	120	119	120
Newport	3,715	3,800	4,400	4,890	6,548	7,116

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Municipal System	2004	2010	2020	2030	2040	2050
Nininger Twp.	0	0	0	0	0	0
North St. Paul	12,273	12,600	12,700	13,400	14,802	15,482
Norwood Young America	3,272	4,432	6,632	8,732	11,057	12,903
Oak Grove	0	0	0	0	0	0
Oak Park Heights	4,529	5,396	5,296	5,596	6,373	6,915
Oakdale	28,000	28,700	29,100	30,700	33,278	34,961
Orono	2,664	3,236	4,113	4,413	6,069	6,780
Osseo	2,522	2,600	2,850	3,300	3,632	4,004
Pine Springs	0	0	0	0	0	0
Plymouth	70,700	73,000	76,000	78,500	86,190	90,797
Prior Lake	19,662	26,506	38,906	38,406	47,554	55,290
Ramsey	9,482	20,742	34,442	33,442	42,593	50,108
Randolph	400	370	390	400	768	862
Randolph Twp.	0	0	0	0	0	0
Ravenna Twp.	0	0	0	0	0	0
Richfield	34,439	37,700	41,300	45,000	47,547	51,716
Robbinsdale	14,126	15,200	16,600	16,500	16,908	17,758
Rogers	5,660	13,000	14,400	24,200	32,803	41,718
Rosemount	18,773	22,700	30,100	35,700	43,171	50,202
San Francisco Twp.	0	0	0	0	0	0
Sand Creek Twp.	0	0	0	0	0	0
Savage	25,000	31,900	39,000	42,700	49,605	56,833
Sciota Twp.	0	0	0	0	0	0
Shakopee PUC	27,309	37,896	46,896	50,396	75,160	87,560
Shoreview	27,000	28,500	29,000	29,000	32,179	32,868
Shorewood	3,422	3,647	3,797	3,897	4,348	4,978
South St. Paul	20,167	19,900	20,000	20,700	21,405	22,116
Spring Lake Park	7,090	6,710	6,710	6,910	7,509	7,488
Spring Lake Twp.	0	0	0	0	0	0
Spring Park	1,720	1,850	2,000	2,100	2,181	2,327
St. Anthony	8,250	9,150	9,400	10,000	11,086	11,785
St. Bonifacius	2,320	2,850	2,750	2,900	3,345	3,639
St. Francis	4,190	5,390	8,090	10,490	13,330	16,030
St. Lawrence Twp.	0	0	0	0	0	0
St. Louis Park	44,126	47,000	49,300	51,500	53,046	55,902
St. Marys Point	0	0	0	0	0	0
St. Paul Park	5,070	7,650	9,700	10,400	11,588	12,180
St. Paul RWS	415,857	441,410	462,530	486,670	517,286	546,202
Stillwater	16,109	17,994	20,194	18,794	20,897	22,329
Stillwater Twp.	0	0	0	0	0	0
Sunfish Lake	0	0	0	0	0	0
Tonka Bay	1,547	1,747	1,747	1,747	1,880	1,957
Vadnais Heights	13,223	13,800	14,300	16,800	19,238	20,878
Vermillion	488	520	600	720	864	958
Vermillion Twp.	0	0	0	0	0	0
Victoria	5,310	10,530	19,430	27,830	32,478	36,812
Waconia	9,000	10,600	20,000	25,000	28,213	30,720
Waconia Twp.	0	0	0	0	0	0
Waterford Twp.	0	0	0	0	0	0
Watertown	3,700	4,800	6,500	7,700	9,475	11,130
Watertown Twp.	0	0	0	0	0	0
Wayzata	4,113	4,300	4,500	4,700	4,723	5,098

Table E-1: Population Served Forecasts by Community

Municipal System	2004	2010	2020	2030	2040	2050
West Lakeland Twp.	0	0	0	0	0	0
White Bear Lake	24,324	26,581	27,211	27,311	28,963	30,649
White Bear Twp.	13,350	14,850	16,350	16,750	18,228	19,679
Woodbury	52,400	60,000	73,500	84,000	96,884	111,125
Young America Twp.	0	0	0	0	0	0
Total	2,556,696	2,817,843	3,176,046	3,423,533	3,814,464	4,140,075

Note: Projections were combined for communities that share water supply systems.

Table E-2: Municipal Water Supply Demand Projections by Community (Million Gallons per Day)

Community	2004		2010		2020		2030		2040		2050	
	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand
Afton	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Andover	2.265	8.961	2.750	10.880	3.352	12.235	3.351	11.475	4.036	13.820	4.602	15.760
Anoka	2.347	4.365	2.454	4.564	2.557	4.756	2.686	4.996	2.840	5.283	3.013	5.604
Apple Valley	5.810	22.173	7.221	27.558	7.683	27.640	7.500	28.480	8.278	31.434	9.079	34.478
Bayport	0.224	0.713	0.327	1.039	0.377	1.197	0.426	1.356	0.521	1.655	0.601	1.910
Baytown Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Belle Plaine	0.504	1.695	0.706	2.373	1.159	3.898	1.613	5.423	1.883	6.331	2.117	7.117
Belle Plaine Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Benton Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bethel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Blaine	6.546	19.601	8.474	25.374	9.550	28.777	9.287	29.537	10.562	33.594	11.888	37.812
Blakeley Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bloomington	8.739	32.450	8.949	33.231	9.256	34.370	9.512	35.320	9.585	35.591	10.011	37.174
Brooklyn Center	3.383	10.581	3.421	10.699	3.537	11.062	3.250	10.325	3.288	10.446	3.345	10.628
Brooklyn Park	8.166	27.894	8.537	29.162	8.764	30.188	8.767	29.750	9.838	33.385	10.441	35.432
Burns Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Burnsville	7.524	21.396	7.529	21.411	7.726	21.969	7.971	22.667	8.584	24.412	8.806	25.041
Camden Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Carver	0.238	0.669	0.644	1.903	1.972	6.473	2.265	7.435	2.807	8.960	2.964	9.459
Castle Rock Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cedar Lake Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Centerville	0.222	0.730	0.225	0.742	0.252	0.829	0.291	0.958	0.332	1.094	0.375	1.236
Champlin	2.476	11.522	2.481	11.543	2.438	10.728	2.436	10.056	2.700	11.145	2.851	11.769
Chanhassen	2.827	9.390	3.287	10.917	3.918	12.938	4.088	13.300	4.940	16.074	5.449	17.729
Chaska	2.819	9.217	3.560	11.640	4.148	13.009	4.256	14.089	5.085	16.834	5.638	18.667
Circle Pines	0.443	1.605	0.488	1.768	0.479	1.736	0.488	1.768	0.530	1.919	0.554	2.006
Coates	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cologne	0.094	0.314	0.270	0.898	0.498	1.655	0.865	2.876	0.936	3.112	1.004	3.336
Columbus Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coon Rapids	7.968	26.496	8.404	27.944	8.020	26.400	7.483	26.000	7.994	27.777	8.145	28.303

Table E-2: Municipal Water Supply Demand Projections by Community (Million Gallons per Day)

Community	2004		2010		2020		2030		2040		2050	
	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand
Corcoran	0.000	0.000	1.002	2.290	2.812	6.636	3.696	8.960	4.506	10.701	5.352	12.711
Cottage Grove	3.728	12.601	3.856	13.036	4.620	15.890	5.110	18.550	5.926	21.514	6.827	24.783
Credit River Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dahlgren Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dayton	0.022	0.073	0.357	1.057	2.374	6.784	3.484	9.033	4.522	12.174	5.675	15.278
Dellwood	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Denmark Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Douglas Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Eagan	7.687	26.947	7.710	27.027	7.434	27.200	7.146	27.600	7.590	29.317	7.894	30.491
East Bethel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Eden Prairie	8.422	25.131	8.450	25.213	8.198	25.000	7.828	25.200	8.501	27.364	8.848	28.481
Edina	7.345	21.772	7.589	22.495	7.357	22.955	7.179	21.888	7.197	21.168	7.481	21.466
Elko	0.038	0.131	0.196	0.668	0.549	1.868	0.906	3.084	1.068	3.634	1.226	4.174
Empire Twp.	0.166	0.540	0.235	0.760	0.423	1.372	0.610	1.977	0.711	2.303	0.812	2.632
Eureka Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Excelsior	0.308	0.667	0.316	0.683	0.343	0.742	0.357	0.772	0.376	0.814	0.397	0.860
Farmington	1.580	6.116	1.673	6.478	2.212	8.564	2.612	10.112	3.138	12.149	3.682	14.257
Forest Lake	1.146	2.430	1.631	4.115	2.236	5.640	2.870	7.240	3.507	8.848	3.967	9.006
Fridley	3.210	10.705	3.157	10.530	2.989	10.088	2.894	9.625	2.992	9.948	3.056	10.164
Gem Lake	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Grant	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Greenfield	0.020	0.052	0.076	0.200	0.196	0.476	0.220	0.564	0.311	0.799	0.416	1.068
Greenvale Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ham Lake	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Hamburg	0.045	0.094	0.048	0.101	0.064	0.188	0.085	0.250	0.094	0.292	0.109	0.341
Hampton	0.067	0.309	0.075	0.343	0.075	0.292	0.072	0.296	0.082	0.337	0.091	0.371
Hampton Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Hancock Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Hanover (pt.)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Community	2004		2010		2020		2030		2040		2050	
	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand
Hassan Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Hastings	2.681	9.051	2.936	9.913	3.335	11.000	3.447	12.000	4.068	14.163	4.451	15.496
Helena Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Hollywood Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Hopkins	2.605	4.673	2.685	4.817	2.790	5.005	2.835	5.086	2.868	5.146	2.960	5.311
Hugo	0.474	1.672	1.504	5.305	2.366	8.749	3.227	12.599	3.842	15.000	4.476	17.476
Independence	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inver Grove Heights	3.023	7.850	3.193	8.293	3.862	10.030	4.222	10.964	4.768	12.383	5.110	13.271
Jackson Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jordan	0.407	1.271	0.720	2.304	0.830	2.656	1.150	3.680	1.409	4.226	1.675	5.026
Lake Elmo	0.165	0.734	0.395	1.530	0.942	4.664	1.360	6.371	1.840	8.622	2.358	11.049
Lakeland	0.244	0.999	0.238	0.975	0.226	0.929	0.223	0.914	0.237	0.972	0.238	0.978
Laketown Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Lakeville	5.860	19.632	7.189	24.084	8.999	31.360	9.657	35.520	12.074	44.411	13.170	48.444
Lexington	0.247	1.466	0.258	1.537	0.246	1.294	0.238	1.035	0.256	0.990	0.265	1.023
Lilydale	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Lino Lakes	1.292	5.221	1.662	6.719	1.934	7.776	2.220	8.798	2.694	10.672	3.088	12.235
Linwood Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Long Lake	0.102	0.842	0.117	0.960	0.119	0.900	0.123	0.980	0.135	1.076	0.147	1.175
Loretto	0.064	0.284	0.071	0.316	0.069	0.280	0.065	0.280	0.071	0.306	0.074	0.319
Louisville Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mahtomedi	0.761	2.009	0.756	1.998	0.747	1.972	0.749	1.977	0.937	2.475	1.013	2.676
Maple Grove	7.772	33.900	8.468	32.250	9.441	37.850	9.925	37.800	11.412	38.634	12.881	43.610
Maple Plain	0.281	0.574	0.343	0.701	0.346	0.707	0.350	0.715	0.379	0.774	0.394	0.806
Marine on St. Croix	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Marshan Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
May Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mayer	0.075	0.187	0.187	0.563	0.389	1.212	0.597	1.857	0.696	2.167	0.788	2.453
Medicine Lake	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Medina	0.368	1.107	0.531	1.596	0.962	2.862	1.357	4.262	1.696	4.490	2.019	6.342

Table E-2: Municipal Water Supply Demand Projections by Community (Million Gallons per Day)

Community	2004		2010		2020		2030		2040		2050	
	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand
Miesville	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Minneapolis	64.252	143.924	67.215	150.561	70.278	157.422	72.257	161.857	74.289	166.407	77.582	173.784
Minnetonka	7.999	22.119	8.004	22.133	7.608	20.688	7.483	21.480	7.779	22.327	8.070	23.164
Minnetonka Beach	0.077	0.267	0.080	0.278	0.079	0.264	0.075	0.264	0.076	0.269	0.077	0.272
Minnetrista	0.211	0.646	0.263	0.803	0.840	2.234	1.351	3.794	1.527	4.608	1.832	5.528
Mound	0.698	3.569	0.748	3.824	0.754	3.939	0.741	3.816	0.778	4.004	0.821	4.229
Mounds View	1.415	3.821	1.433	3.870	1.444	3.900	1.488	4.020	1.616	4.365	1.655	4.472
New Brighton	4.092	8.683	4.173	8.855	4.136	8.777	3.982	8.894	4.078	8.873	4.208	8.916
New Germany	0.029	0.089	0.036	0.108	0.049	0.147	0.071	0.213	0.088	0.265	0.104	0.313
New Market	0.300	0.359	0.297	0.906	0.616	2.074	0.934	3.322	1.134	4.031	1.333	4.740
New Market Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
New Scandia Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
New Trier	0.010	0.043	0.010	0.045	0.010	0.042	0.009	0.042	0.009	0.042	0.009	0.042
Newport	0.330	0.761	0.338	0.778	0.391	0.901	0.435	1.002	0.582	1.341	0.633	1.458
Nininger Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
North St. Paul	1.223	4.563	1.256	4.684	1.202	4.445	1.202	4.690	1.328	5.181	1.389	5.419
Norwood Young America	0.349	0.708	0.472	1.042	0.707	1.658	0.930	2.183	1.178	2.764	1.375	3.226
Oak Grove	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Oak Park Heights	0.639	1.617	0.761	1.926	0.709	1.854	0.710	1.959	0.809	2.231	0.878	2.420
Oakdale	2.940	15.334	3.013	15.717	2.903	13.095	2.901	12.280	3.145	13.311	3.304	13.985
Orono	0.328	1.066	0.398	1.294	0.519	1.774	0.524	1.894	0.672	2.298	0.751	2.712
Osseo	0.295	1.009	0.304	1.040	0.317	1.140	0.347	1.320	0.382	1.453	0.422	1.601
Pine Springs	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Plymouth	9.660	26.257	9.974	27.111	9.865	26.600	9.653	27.475	10.599	30.167	11.165	31.779
Prior Lake	2.050	6.289	2.764	8.479	4.057	12.445	4.005	12.285	4.959	15.211	5.765	17.686
Ramsey	1.509	7.132	3.300	15.601	5.206	22.387	4.932	17.221	6.243	17.037	7.319	20.443
Randolph	0.043	0.171	0.040	0.159	0.040	0.156	0.039	0.160	0.075	0.307	0.084	0.345
Randolph Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ravenna Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table E-2: Municipal Water Supply Demand Projections by Community (Million Gallons per Day)

Community	2004		2010		2020		2030		2040		2050	
	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand
Richfield	3.386	7.230	3.706	7.915	4.060	8.670	4.424	9.447	4.675	9.982	5.084	10.857
Robbinsdale	1.545	3.347	1.662	3.601	1.816	3.933	1.805	3.909	1.849	4.006	1.942	4.207
Rogers	1.202	4.111	2.762	9.442	2.906	9.360	4.627	12.100	6.272	13.121	7.977	16.687
Rosemount	2.011	6.383	2.432	7.718	3.225	10.234	3.825	12.138	4.625	14.678	5.379	17.069
San Francisco Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sand Creek Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Savage	2.828	9.123	3.608	11.641	4.191	13.650	4.347	14.945	5.050	17.362	5.785	19.892
Sciota Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Shakopee PUC	4.568	13.473	6.340	18.696	7.453	18.758	7.588	20.158	11.316	30.064	13.183	35.024
Shoreview	3.193	11.535	3.370	12.176	3.258	11.600	3.086	11.600	3.425	12.872	3.498	13.147
Shorewood	0.496	2.195	0.528	2.339	0.523	1.709	0.508	1.559	0.567	1.739	0.649	1.991
South St. Paul	3.211	7.400	3.169	7.302	3.025	7.000	2.966	7.245	3.067	7.492	3.169	7.741
Spring Lake Park	0.741	2.482	0.701	2.349	0.666	2.349	0.650	2.419	0.706	2.628	0.704	2.621
Spring Lake Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Spring Park	0.219	0.391	0.236	0.421	0.255	0.455	0.268	0.477	0.278	0.496	0.296	0.529
St. Anthony	0.929	1.600	1.031	1.775	1.059	1.823	1.127	1.940	1.249	2.150	1.328	2.286
St. Bonifacius	0.235	0.626	0.289	0.770	0.279	0.743	0.294	0.783	0.339	0.903	0.369	0.983
St. Francis	0.401	1.404	0.516	1.806	0.774	2.711	1.003	3.515	1.275	4.467	1.533	5.371
St. Lawrence Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
St. Louis Park	6.115	11.554	6.513	12.307	6.832	12.909	7.137	13.485	7.351	13.890	7.747	14.638
St. Marys Point	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
St. Paul Park	0.539	1.342	0.813	2.025	1.031	2.568	1.106	2.753	1.232	3.067	1.295	3.224
St. Paul RWS	48.853	108.092	51.854	114.733	54.335	120.223	57.171	126.498	60.768	134.456	64.165	141.972
Stillwater	2.035	6.130	2.273	6.847	2.424	7.573	2.137	6.578	2.376	7.314	2.539	7.815
Stillwater Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sunfish Lake	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Tonka Bay	0.192	0.775	0.217	0.875	0.206	0.786	0.195	0.699	0.210	0.752	0.219	0.783
Vadnais Heights	1.482	4.562	1.546	4.761	1.602	4.934	1.882	5.796	2.156	6.637	2.339	7.203
Vermillion	0.072	0.176	0.077	0.188	0.084	0.210	0.096	0.252	0.115	0.302	0.127	0.335
Vermillion Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table E-2: Municipal Water Supply Demand Projections by Community (Million Gallons per Day)

Community	2004		2010		2020		2030		2040		2050	
	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand	Ave Day Demand	Max Day Demand
Victoria	0.480	1.979	0.952	3.924	1.375	6.801	1.865	9.741	2.177	11.367	2.467	12.884
Waconia	0.894	2.273	1.053	2.677	1.987	5.051	2.483	6.313	2.802	7.125	3.051	7.758
Waconia Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Waterford Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Watertown	0.328	0.931	0.426	1.208	0.577	1.636	0.683	1.937	0.840	2.384	0.987	2.801
Watertown Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wayzata	0.847	2.631	0.886	2.751	0.881	2.591	0.872	2.706	0.876	2.550	0.945	2.549
West Lakeland Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
White Bear Lake	2.639	7.613	2.884	8.319	2.952	8.516	2.963	8.547	3.143	9.064	3.326	9.592
White Bear Twp.	1.545	4.897	1.719	5.447	1.798	5.723	1.745	5.863	1.899	6.380	2.050	6.888
Woodbury	6.669	22.668	7.637	25.956	8.887	29.400	9.622	31.500	11.098	34.878	12.729	40.005
Young America Twp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	318.905	904.156	351.433	1001.686	385.354	1100.650	403.890	1160.872	447.719	1279.356	485.487	1390.620

Note: Projections were combined for communities that share water supply systems.

**Table E-3: Projected Private Water Supply Demands by Community:
Average Water Use (Million Gallons per Day)**

Community	2004	2010	2020	2030	2040	2050
Afton	0.259	0.286	0.321	0.356	0.372	0.389
Andover	1.039	1.039	1.039	1.039	1.039	1.039
Anoka	0.000	0.000	0.000	0.000	0.000	0.000
Apple Valley	0.000	0.000	0.000	0.000	0.000	0.000
Bayport	0.000	0.000	0.000	0.000	0.000	0.000
Baytown Twp.	0.150	0.160	0.172	0.190	0.369	0.436
Belle Plaine	0.026	0.026	0.026	0.026	0.026	0.026
Belle Plaine Twp.	0.080	0.068	0.070	0.114	0.133	0.152
Benton Twp.	0.083	0.083	0.083	0.083	0.087	0.088
Bethel	0.044	0.040	0.040	0.045	0.048	0.053
Blaine	0.366	0.366	0.366	0.366	0.366	0.366
Blakeley Twp.	0.045	0.053	0.064	0.070	0.077	0.083
Bloomington	0.000	0.000	0.000	0.000	0.000	0.000
Brooklyn Center	0.000	0.000	0.000	0.000	0.000	0.000
Brooklyn Park	0.000	0.000	0.000	0.000	0.000	0.000
Burns Twp.	0.362	0.394	0.439	0.510	0.641	0.743
Burnsville	0.006	0.000	0.000	0.000	0.000	0.000
Camden Twp.	0.087	0.084	0.086	0.091	0.099	0.103
Carver	0.010	0.010	0.010	0.010	0.010	0.010
Castle Rock Twp.	0.134	0.132	0.136	0.145	0.156	0.166
Cedar Lake Twp.	0.226	0.234	0.270	0.326	0.375	0.427
Centerville	0.023	0.023	0.023	0.023	0.023	0.023
Champlin	0.058	0.058	0.058	0.058	0.058	0.058
Chanhassen	0.000	0.000	0.000	0.000	0.000	0.000
Chaska	0.042	0.042	0.042	0.042	0.042	0.042
Circle Pines	0.004	0.000	0.000	0.000	0.000	0.000
Coates	0.015	0.015	0.017	0.018	0.020	0.021
Cologne	0.014	0.014	0.014	0.014	0.014	0.014
Columbus Twp.	0.363	0.352	0.373	0.412	0.437	0.475
Coon Rapids	0.000	0.000	0.000	0.000	0.000	0.000
Corcoran	0.517	0.517	0.361	0.194	0.192	0.192
Cottage Grove	0.000	0.000	0.000	0.000	0.000	0.000
Credit River Twp.	0.388	0.406	0.429	0.458	0.914	1.069
Dahlgren Twp.	0.131	0.194	0.132	0.132	0.132	0.132
Dayton	0.408	0.276	0.276	0.254	0.232	0.276
Dellwood	0.095	0.093	0.087	0.085	0.092	0.094
Denmark Twp.	0.133	0.154	0.189	0.224	0.264	0.301
Douglas Twp.	0.070	0.072	0.075	0.077	0.085	0.090
Eagan	0.000	0.000	0.000	0.000	0.000	0.000
East Bethel	1.004	1.038	1.030	1.065	1.399	1.529
Eden Prairie	0.000	0.000	0.000	0.000	0.000	0.000
Edina	0.055	0.000	0.000	0.000	0.000	0.000
Elko	0.049	0.049	0.049	0.049	0.049	0.049
Empire Twp.	0.040	0.040	0.040	0.040	0.040	0.040
Eureka Twp.	0.137	0.132	0.145	0.158	0.175	0.189

**Table E-3: Projected Private Water Supply Demands by Community:
Average Water Use (Million Gallons per Day)**

Community	2004	2010	2020	2030	2040	2050
Excelsior	0.071	0.071	0.071	0.071	0.071	0.071
Farmington	0.000	0.000	0.000	0.000	0.000	0.000
Forest Lake	0.461	0.461	0.461	0.461	0.461	0.461
Fridley	0.000	0.000	0.000	0.000	0.000	0.000
Gem Lake	0.039	0.039	0.040	0.043	0.055	0.061
Grant	0.368	0.387	0.392	0.396	0.472	0.504
Greenfield	0.237	0.237	0.237	0.237	0.237	0.237
Greenvale Twp.	0.066	0.064	0.070	0.077	0.087	0.095
Grey Cloud Island Twp.	0.027	0.097	0.290	0.598	0.732	0.882
Ham Lake	1.277	1.338	1.338	1.338	1.866	2.069
Hamburg	0.000	0.000	0.000	0.000	0.000	0.000
Hampton	0.000	0.000	0.000	0.000	0.000	0.000
Hampton Twp.	0.091	0.088	0.092	0.106	0.113	0.126
Hancock Twp.	0.034	0.034	0.037	0.039	0.042	0.045
Hanover (pt.)	0.040	0.036	0.045	0.055	0.066	0.076
Hassan Twp.	0.229	0.308	0.537	0.396	0.290	0.194
Hastings	0.000	0.000	0.000	0.000	0.000	0.000
Helena Twp.	0.143	0.141	0.158	0.194	0.223	0.253
Hollywood Twp.	0.101	0.097	0.101	0.114	0.121	0.135
Hopkins	0.027	0.000	0.000	0.000	0.000	0.000
Hugo	0.352	0.352	0.352	0.352	0.352	0.352
Independence	0.317	0.352	0.394	0.431	0.494	0.537
Inver Grove Heights	0.170	0.170	0.170	0.170	0.170	0.170
Jackson Twp.	0.124	0.125	0.132	0.147	0.000	0.000
Jordan	0.000	0.000	0.000	0.000	0.000	0.000
Lake Elmo	0.510	0.510	0.510	0.510	0.510	0.510
Lakeland	0.000	0.000	0.000	0.000	0.000	0.000
Laketown Twp.	0.202	0.158	0.073	0.000	0.000	0.000
Lakeville	0.053	0.000	0.000	0.000	0.000	0.000
Lexington	0.001	0.000	0.000	0.000	0.000	0.000
Lilydale	0.070	0.082	0.082	0.082	0.087	0.093
Lino Lakes	0.490	0.490	0.490	0.490	0.490	0.490
Linwood Twp.	0.431	0.433	0.440	0.475	0.566	0.622
Long Lake	0.000	0.000	0.000	0.000	0.000	0.000
Loretto	0.000	0.000	0.000	0.000	0.000	0.000
Louisville Twp.	0.124	0.122	0.132	0.150	0.167	0.183
Mahtomedi	0.066	0.066	0.066	0.066	0.066	0.066
Maple Grove	0.000	0.000	0.000	0.000	0.000	0.000
Maple Plain	0.000	0.000	0.000	0.000	0.000	0.000
Marine on St. Croix	0.058	0.067	0.077	0.088	0.101	0.112
Marshan Twp.	0.115	0.114	0.119	0.123	0.133	0.140
May Twp.	0.270	0.282	0.317	0.352	0.402	0.438
Mayer	0.005	0.005	0.005	0.005	0.005	0.005
Medicine Lake	0.033	0.037	0.039	0.041	0.043	0.047

**Table E-3: Projected Private Water Supply Demands by Community:
Average Water Use (Million Gallons per Day)**

Community	2004	2010	2020	2030	2040	2050
Medina	0.180	0.180	0.180	0.180	0.180	0.180
Miesville	0.012	0.013	0.013	0.013	0.013	0.014
Minneapolis	0.000	0.000	0.000	0.000	0.000	0.000
Minnetonka	0.370	0.370	0.370	0.370	0.370	0.370
Minnetonka Beach	0.000	0.000	0.000	0.000	0.000	0.000
Minnetrista	0.336	0.336	0.336	0.336	0.336	0.336
Mound	0.044	0.044	0.044	0.044	0.044	0.044
Mounds View	0.011	0.000	0.000	0.000	0.000	0.000
New Brighton	0.006	0.000	0.000	0.000	0.000	0.000
New Germany	0.000	0.000	0.000	0.000	0.000	0.000
New Market	0.019	0.019	0.019	0.019	0.019	0.019
New Market Twp.	0.308	0.349	0.422	0.502	0.772	0.917
New Scandia Twp.	0.349	0.385	0.440	0.475	0.513	0.562
New Trier	0.000	0.000	0.000	0.000	0.000	0.000
Newport	0.000	0.000	0.000	0.000	0.000	0.000
Nininger Twp.	0.081	0.083	0.087	0.092	0.102	0.109
North St. Paul	0.000	0.000	0.000	0.000	0.000	0.000
Norwood Young America	0.006	0.006	0.006	0.006	0.006	0.006
Oak Grove	0.656	0.678	0.730	0.757	0.811	0.874
Oak Park Heights	0.009	0.009	0.009	0.009	0.009	0.009
Oakdale	0.036	0.000	0.000	0.000	0.000	0.000
Orono	0.474	0.446	0.446	0.446	0.446	0.446
Osseo	0.000	0.000	0.000	0.000	0.000	0.000
Pine Springs	0.037	0.035	0.033	0.032	0.033	0.032
Plymouth	0.000	0.000	0.000	0.000	0.000	0.000
Prior Lake	0.131	0.131	0.131	0.131	0.131	0.131
Ramsey	0.929	0.929	0.929	0.841	0.841	0.841
Randolph	0.000	0.000	0.000	0.000	0.000	0.000
Randolph Twp.	0.054	0.055	0.055	0.059	0.065	0.070
Ravenna Twp.	0.214	0.220	0.229	0.246	0.267	0.288
Richfield	0.005	0.000	0.000	0.000	0.000	0.000
Robbinsdale	0.000	0.000	0.000	0.000	0.000	0.000
Rogers	0.009	0.000	0.000	0.000	0.000	0.000
Rosemount	0.000	0.000	0.000	0.000	0.000	0.000
San Francisco Twp.	0.080	0.086	0.097	0.106	0.120	0.130
Sand Creek Twp.	0.144	0.145	0.163	0.185	0.257	0.289
Savage	0.000	0.000	0.000	0.000	0.000	0.000
Sciota Twp.	0.030	0.033	0.038	0.044	0.052	0.059
Shakopee PUC	0.141	0.141	0.141	0.141	0.141	0.141
Shoreview	0.000	0.000	0.000	0.000	0.000	0.000
Shorewood	0.370	0.370	0.370	0.370	0.370	0.370
South St. Paul	0.007	0.000	0.000	0.000	0.000	0.000
Spring Lake Park	0.000	0.000	0.000	0.000	0.000	0.000
Spring Lake Twp.	0.341	0.376	0.429	0.484	0.528	0.528

**Table E-3: Projected Private Water Supply Demands by Community:
Average Water Use (Million Gallons per Day)**

Community	2004	2010	2020	2030	2040	2050
Spring Park	0.000	0.000	0.000	0.000	0.000	0.000
St. Anthony	0.000	0.000	0.000	0.000	0.000	0.000
St. Bonifacius	0.000	0.000	0.000	0.000	0.000	0.000
St. Francis	0.203	0.203	0.203	0.203	0.203	0.203
St. Lawrence Twp.	0.047	0.053	0.070	0.123	0.176	0.208
St. Louis Park	0.034	0.000	0.000	0.000	0.000	0.000
St. Marys Point	0.030	0.033	0.031	0.030	0.038	0.039
St. Paul Park	0.000	0.000	0.000	0.000	0.000	0.000
St. Paul RWS	0.000	0.000	0.000	0.000	0.000	0.000
Stillwater	0.097	0.097	0.097	0.097	0.097	0.097
Stillwater Twp.	0.229	0.237	0.259	0.295	0.458	0.531
Sunfish Lake	0.047	0.045	0.046	0.047	0.050	0.052
Tonka Bay	0.005	0.005	0.005	0.005	0.005	0.005
Vadnais Heights	0.004	0.000	0.000	0.000	0.000	0.000
Vermillion	0.000	0.000	0.000	0.000	0.000	0.000
Vermillion Twp.	0.114	0.110	0.119	0.132	0.141	0.156
Victoria	0.015	0.015	0.015	0.015	0.015	0.015
Waconia	0.000	0.000	0.000	0.000	0.000	0.000
Waconia Twp.	0.117	0.118	0.128	0.140	0.132	0.132
Waterford Twp.	0.047	0.048	0.049	0.050	0.054	0.056
Watertown	0.004	0.000	0.000	0.000	0.000	0.000
Watertown Twp.	0.126	0.129	0.143	0.158	0.158	0.158
Wayzata	0.000	0.000	0.000	0.000	0.000	0.000
West Lakeland Twp.	0.337	0.340	0.348	0.369	0.415	0.444
White Bear Lake	0.138	0.138	0.138	0.138	0.138	0.138
White Bear Twp.	0.233	0.233	0.233	0.233	0.233	0.233
Woodbury	0.000	0.000	0.000	0.000	0.000	0.000
Young America Twp.	0.076	0.077	0.084	0.106	0.123	0.138
Total	20.355	20.532	21.418	22.313	25.251	27.021

Note: Projections were combined for communities that share water supply systems.

**Table E-4: Projected Non-Municipal Water Supply Demands by Community:
Average Water Use (Million Gallons per Day)**

Community	2004	2010	2020	2030	2040	2050
Afton	0.055	0.055	0.055	0.055	0.055	0.055
Andover	0.183	0.183	0.183	0.183	0.153	0.153
Anoka	0.419	0.419	0.419	0.419	0.419	0.419
Apple Valley	0.320	0.320	0.320	0.320	0.320	0.320
Bayport	0.908	0.908	0.908	0.908	0.908	0.908
Baytown Twp.	0.092	0.092	0.092	0.092	0.092	0.092
Belle Plaine	0.005	0.005	0.005	0.005	0.005	0.005
Belle Plaine Twp.	0.053	0.053	0.053	0.053	0.049	0.049
Benton Twp.	0.402	0.402	0.402	0.402	0.402	0.402
Bethel	0.000	0.000	0.000	0.000	0.000	0.000
Blaine	0.419	0.419	0.419	0.419	0.419	0.419
Blakeley Twp.	0.000	0.000	0.000	0.000	0.000	0.000
Bloomington	1.664	1.664	1.664	1.664	1.664	1.664
Brooklyn Center	0.244	0.244	0.244	0.244	0.244	0.244
Brooklyn Park	0.375	0.366	0.366	0.366	0.366	0.366
Burns Twp.	0.040	0.040	0.040	0.040	0.040	0.040
Burnsville	11.363	0.756	0.756	0.756	0.756	0.756
Camden Twp.	0.070	0.070	0.070	0.070	0.070	0.070
Carver	0.000	0.000	0.000	0.000	0.000	0.000
Castle Rock Twp.	0.732	0.732	0.732	0.732	0.732	0.732
Cedar Lake Twp.	0.036	0.036	0.036	0.036	0.036	0.036
Centerville	0.000	0.000	0.000	0.000	0.000	0.000
Champlin	0.047	0.034	0.034	0.034	0.034	0.034
Chanhassen	0.177	0.177	0.177	0.177	0.177	0.177
Chaska	0.490	0.490	0.490	0.490	0.490	0.490
Circle Pines	0.000	0.000	0.000	0.000	0.000	0.000
Coates	0.000	0.000	0.000	0.000	0.000	0.000
Cologne	0.000	0.000	0.000	0.000	0.000	0.000
Columbus Twp.	0.178	0.178	0.178	0.178	0.178	0.178
Coon Rapids	0.335	0.287	0.287	0.287	0.287	0.287
Corcoran	0.089	0.089	0.089	0.089	0.089	0.089
Cottage Grove	4.818	4.818	4.818	4.818	4.697	4.697
Credit River Twp.	0.232	0.232	0.232	0.232	0.232	0.232
Dahlgren Twp.	0.076	0.076	0.076	0.076	0.076	0.076
Dayton	0.104	0.104	0.104	0.104	0.104	0.104
Dellwood	0.062	0.062	0.062	0.062	0.062	0.062
Denmark Twp.	0.328	0.328	0.328	0.328	0.328	0.328
Douglas Twp.	2.111	2.111	2.111	2.111	2.111	2.111
Eagan	2.587	2.587	2.587	2.587	2.587	2.587
East Bethel	0.277	0.277	0.277	0.277	0.277	0.277
Eden Prairie	0.409	0.409	0.409	0.409	0.409	0.409
Edina	0.526	0.404	0.404	0.404	0.404	0.404
Elko	0.065	0.065	0.065	0.065	0.065	0.065
Empire Twp.	1.523	1.523	1.523	1.523	1.523	1.523
Eureka Twp.	0.704	0.704	0.704	0.704	0.704	0.704

**Table E-4: Projected Non-Municipal Water Supply Demands by Community:
Average Water Use (Million Gallons per Day)**

Community	2004	2010	2020	2030	2040	2050
Excelsior	0.000	0.000	0.000	0.000	0.000	0.000
Farmington	1.365	1.340	1.340	1.340	1.291	1.291
Forest Lake	0.118	0.118	0.118	0.118	0.118	0.118
Fridley	0.926	0.926	0.926	0.926	0.926	0.926
Gem Lake	0.072	0.072	0.072	0.072	0.072	0.072
Grant	0.232	0.232	0.232	0.232	0.232	0.232
Greenfield	0.005	0.005	0.005	0.005	0.005	0.005
Greenvale Twp.	0.025	0.025	0.025	0.025	0.025	0.025
Grey Cloud Island Twp.	5.426	5.426	5.426	5.426	5.426	5.426
Ham Lake	0.716	0.716	0.716	0.716	0.716	0.716
Hamburg	0.000	0.000	0.000	0.000	0.000	0.000
Hampton	0.000	0.000	0.000	0.000	0.000	0.000
Hampton Twp.	1.735	1.735	1.735	1.735	1.735	1.735
Hancock Twp.	0.000	0.000	0.000	0.000	0.000	0.000
Hanover (pt.)	0.000	0.000	0.000	0.000	0.000	0.000
Hassan Twp.	0.012	0.012	0.012	0.012	0.012	0.012
Hastings	0.145	0.145	0.145	0.145	0.145	0.145
Helena Twp.	0.000	0.000	0.000	0.000	0.000	0.000
Hollywood Twp.	0.000	0.000	0.000	0.000	0.000	0.000
Hopkins	0.507	0.507	0.507	0.507	0.507	0.507
Hugo	0.051	0.051	0.051	0.051	0.051	0.051
Independence	0.203	0.203	0.203	0.203	0.203	0.203
Inver Grove Heights	0.102	0.102	0.102	0.102	0.102	0.102
Jackson Twp.	0.019	0.019	0.019	0.019	0.019	0.019
Jordan	0.000	0.000	0.000	0.000	0.000	0.000
Lake Elmo	0.298	0.298	0.298	0.298	0.298	0.298
Lakeland	0.069	0.069	0.069	0.069	0.069	0.069
Laketown Twp.	0.089	0.040	0.040	0.040	0.040	0.040
Lakeville	0.606	0.606	0.606	0.606	0.606	0.606
Lexington	0.000	0.000	0.000	0.000	0.000	0.000
Lilydale	0.000	0.000	0.000	0.000	0.000	0.000
Lino Lakes	0.338	0.335	0.335	0.335	0.335	0.335
Linwood Twp.	0.000	0.000	0.000	0.000	0.000	0.000
Long Lake	0.000	0.000	0.000	0.000	0.000	0.000
Loretto	0.000	0.000	0.000	0.000	0.000	0.000
Louisville Twp.	0.019	0.019	0.019	0.019	0.019	0.019
Mahtomedi	0.000	0.000	0.000	0.000	0.000	0.000
Maple Grove	0.409	0.401	0.401	0.401	0.401	0.401
Maple Plain	0.000	0.000	0.000	0.000	0.000	0.000
Marine on St. Croix	0.000	0.000	0.000	0.000	0.000	0.000
Marshan Twp.	5.638	5.638	5.638	5.638	5.638	5.638
May Twp.	0.008	0.008	0.008	0.008	0.008	0.008
Mayer	0.000	0.000	0.000	0.000	0.000	0.000
Medicine Lake	0.000	0.000	0.000	0.000	0.000	0.000
Medina	0.103	0.103	0.103	0.103	0.103	0.103

**Table E-4: Projected Non-Municipal Water Supply Demands by Community:
Average Water Use (Million Gallons per Day)**

Community	2004	2010	2020	2030	2040	2050
Miesville	0.168	0.168	0.168	0.168	0.168	0.168
Minneapolis	8.937	5.661	5.661	5.661	5.661	5.661
Minnetonka	0.043	0.043	0.043	0.043	0.043	0.043
Minnetonka Beach	0.022	0.022	0.022	0.022	0.022	0.022
Minnetrista	0.094	0.094	0.094	0.094	0.094	0.094
Mound	0.000	0.000	0.000	0.000	0.000	0.000
Mounds View	0.060	0.060	0.060	0.060	0.060	0.060
New Brighton	0.108	0.108	0.108	0.108	0.108	0.108
New Germany	0.000	0.000	0.000	0.000	0.000	0.000
New Market	0.000	0.000	0.000	0.000	0.000	0.000
New Market Twp.	0.000	0.000	0.000	0.000	0.000	0.000
New Scandia Twp.	0.022	0.022	0.022	0.022	0.022	0.022
New Trier	0.000	0.000	0.000	0.000	0.000	0.000
Newport	0.152	0.152	0.148	0.148	0.148	0.148
Nininger Twp.	0.829	0.829	0.829	0.829	0.829	0.829
North St. Paul	0.000	0.000	0.000	0.000	0.000	0.000
Norwood Young America	0.054	0.054	0.054	0.054	0.054	0.054
Oak Grove	0.195	0.195	0.195	0.195	0.195	0.195
Oak Park Heights	0.241	0.241	0.241	0.241	0.241	0.241
Oakdale	0.152	0.152	0.152	0.152	0.152	0.152
Orono	0.248	0.235	0.235	0.235	0.235	0.235
Osseo	0.022	0.022	0.022	0.022	0.022	0.022
Pine Springs	0.000	0.000	0.000	0.000	0.000	0.000
Plymouth	0.888	0.888	0.888	0.888	0.888	0.888
Prior Lake	0.026	0.026	0.026	0.026	0.026	0.026
Ramsey	0.686	0.669	0.638	0.638	0.638	0.638
Randolph	0.000	0.000	0.000	0.000	0.000	0.000
Randolph Twp.	1.287	1.287	1.287	1.287	1.287	1.287
Ravenna Twp.	0.425	0.425	0.425	0.425	0.425	0.425
Richfield	0.000	0.000	0.000	0.000	0.000	0.000
Robbinsdale	0.005	0.005	0.005	0.005	0.005	0.005
Rogers	0.070	0.070	0.070	0.070	0.070	0.070
Rosemount	7.858	7.858	7.727	7.727	7.727	7.727
San Francisco Twp.	0.002	0.002	0.002	0.002	0.002	0.002
Sand Creek Twp.	0.100	0.100	0.100	0.100	0.100	0.100
Savage	0.404	0.404	0.404	0.404	0.404	0.404
Sciota Twp.	0.734	0.734	0.734	0.734	0.734	0.734
Shakopee Mdwakanton Sioux Community						
Shakopee PUC	3.910	3.910	3.907	3.907	3.907	3.907
Shoreview	0.042	0.042	0.042	0.042	0.042	0.042
Shorewood	0.074	0.074	0.074	0.074	0.074	0.074
South St. Paul	0.002	0.002	0.002	0.002	0.002	0.002
Spring Lake Park	0.000	0.000	0.000	0.000	0.000	0.000

**Table E-4: Projected Non-Municipal Water Supply Demands by Community:
Average Water Use (Million Gallons per Day)**

Community	2004	2010	2020	2030	2040	2050
Spring Lake Twp.	0.002	0.002	0.002	0.002	0.002	0.002
Spring Park	0.001	0.001	0.001	0.001	0.001	0.001
St. Anthony	0.039	0.039	0.039	0.039	0.039	0.039
St. Bonifacius	0.000	0.000	0.000	0.000	0.000	0.000
St. Francis	0.027	0.027	0.027	0.027	0.027	0.027
St. Lawrence Twp.	0.004	0.004	0.004	0.004	0.004	0.004
St. Louis Park	0.405	0.405	0.405	0.405	0.405	0.405
St. Marys Point	0.000	0.000	0.000	0.000	0.000	0.000
St. Paul Park	2.073	2.073	2.073	2.073	2.073	2.073
St. Paul RWS	14.055	12.050	12.050	12.050	12.050	12.050
Stillwater	0.115	0.115	0.115	0.115	0.115	0.115
Stillwater Twp.	0.000	0.000	0.000	0.000	0.000	0.000
Sunfish Lake	0.000	0.000	0.000	0.000	0.000	0.000
Tonka Bay	0.000	0.000	0.000	0.000	0.000	0.000
Vadnais Heights	0.143	0.027	0.027	0.027	0.027	0.027
Vermillion	0.074	0.074	0.074	0.074	0.074	0.074
Vermillion Twp.	3.725	3.725	3.725	3.725	3.725	3.725
Victoria	0.028	0.028	0.028	0.028	0.028	0.028
Waconia	0.000	0.000	0.000	0.000	0.000	0.000
Waconia Twp.	0.012	0.012	0.012	0.012	0.012	0.012
Waterford Twp.	0.219	0.219	0.219	0.219	0.219	0.219
Watertown	0.000	0.000	0.000	0.000	0.000	0.000
Watertown Twp.	0.044	0.044	0.044	0.044	0.044	0.044
Wayzata	0.041	0.041	0.041	0.041	0.041	0.041
West Lakeland Twp.	0.190	0.190	0.190	0.190	0.190	0.190
White Bear Lake	0.602	0.602	0.602	0.602	0.602	0.602
White Bear Twp.	0.153	0.153	0.153	0.153	0.153	0.153
Woodbury	4.814	4.814	4.814	4.814	4.655	4.655
Young America Twp.	0.000	0.000	0.000	0.000	0.000	0.000
Total	106.380	90.069	89.900	89.900	89.538	89.538

Notes:

Projections were combined for communities that share water supply systems.

Power generation water use is not included in this table.

**Table E-5: Total Water Supply Demand Projections by Community
(Million Gallons per Day)**

Water Utility	2004	2010	2020	2030	2040	2050
Afton	0.314	0.341	0.376	0.411	0.427	0.444
Andover	3.487	3.972	4.574	4.573	5.228	5.795
Anoka	2.766	2.873	2.976	3.105	3.259	3.432
Apple Valley	6.131	7.542	8.003	7.820	8.598	9.400
Bayport	1.133	1.235	1.285	1.335	1.429	1.509
Baytown Twp.	0.241	0.252	0.264	0.282	0.461	0.528
Belle Plaine	0.535	0.737	1.191	1.644	1.914	2.148
Belle Plaine Twp.	0.132	0.120	0.122	0.167	0.182	0.201
Benton Twp.	0.484	0.484	0.484	0.484	0.488	0.489
Bethel	0.044	0.040	0.040	0.045	0.048	0.053
Blaine	7.331	9.259	10.335	10.072	11.347	12.673
Blakeley Twp.	0.045	0.053	0.064	0.070	0.077	0.083
Bloomington	10.403	10.613	10.920	11.176	11.249	11.675
Brooklyn Center	3.628	3.665	3.781	3.494	3.532	3.590
Brooklyn Park	8.542	8.903	9.130	9.132	10.204	10.807
Burns Twp.	0.401	0.434	0.479	0.550	0.681	0.782
Burnsville	18.893	8.286	8.482	8.727	9.341	9.562
Camden Twp.	0.157	0.155	0.157	0.161	0.169	0.174
Carver	0.247	0.654	1.981	2.274	2.817	2.973
Castle Rock Twp.	0.866	0.864	0.868	0.877	0.888	0.897
Cedar Lake Twp.	0.262	0.270	0.306	0.361	0.411	0.463
Centerville	0.245	0.249	0.275	0.314	0.355	0.399
Champlin	2.581	2.572	2.530	2.528	2.792	2.943
Chanhassen	3.004	3.464	4.095	4.265	5.118	5.626
Chaska	3.351	4.092	4.679	4.787	5.617	6.170
Circle Pines	0.447	0.488	0.479	0.488	0.530	0.554
Coates	0.015	0.015	0.017	0.018	0.020	0.021
Cologne	0.109	0.285	0.512	0.880	0.950	1.018
Columbus Twp.	0.540	0.530	0.551	0.589	0.615	0.653
Coon Rapids	8.303	8.691	8.307	7.770	8.281	8.432
Corcoran	0.606	1.608	3.262	3.979	4.787	5.633
Cottage Grove	8.546	8.674	9.438	9.928	10.624	11.524
Credit River Twp.	0.620	0.638	0.662	0.690	1.146	1.301
Dahlgren Twp.	0.207	0.270	0.208	0.208	0.208	0.208
Dayton	0.534	0.737	2.755	3.843	4.858	6.055
Dellwood	0.157	0.155	0.149	0.147	0.154	0.156
Denmark Twp.	0.461	0.482	0.517	0.552	0.592	0.629
Douglas Twp.	2.180	2.183	2.185	2.188	2.196	2.200
Eagan	10.274	10.297	10.021	9.733	10.178	10.482
East Bethel	1.280	1.315	1.306	1.342	1.676	1.805
Eden Prairie	8.831	8.859	8.607	8.238	8.910	9.257
Edina	7.927	7.993	7.761	7.583	7.601	7.885
Elko	0.153	0.311	0.663	1.020	1.182	1.341
Empire Twp.	1.729	1.797	1.986	2.173	2.273	2.375
Eureka Twp.	0.841	0.836	0.849	0.862	0.879	0.893

**Table E-5: Total Water Supply Demand Projections by Community
(Million Gallons per Day)**

Water Utility	2004	2010	2020	2030	2040	2050
Excelsior	0.379	0.387	0.414	0.428	0.447	0.468
Farmington	2.944	3.013	3.552	3.952	4.429	4.973
Forest Lake	1.725	2.211	2.815	3.449	4.086	4.546
Fridley	4.136	4.084	3.915	3.821	3.918	3.983
Gem Lake	0.111	0.111	0.112	0.115	0.127	0.133
Grant	0.600	0.620	0.624	0.628	0.704	0.737
Greenfield	0.262	0.318	0.438	0.461	0.553	0.658
Greenvale Twp.	0.091	0.089	0.094	0.102	0.112	0.120
Grey Cloud Island Twp.	5.453	5.523	5.716	6.024	6.158	6.307
Ham Lake	1.993	2.054	2.054	2.054	2.582	2.785
Hamburg	0.045	0.048	0.064	0.085	0.094	0.109
Hampton	0.067	0.075	0.075	0.072	0.082	0.091
Hampton Twp.	1.826	1.823	1.828	1.841	1.848	1.862
Hancock Twp.	0.034	0.034	0.037	0.039	0.042	0.045
Hanover (pt.)	0.040	0.036	0.045	0.055	0.066	0.076
Hassan Twp.	0.241	0.320	0.549	0.408	0.303	0.206
Hastings	2.826	3.081	3.480	3.592	4.213	4.596
Helena Twp.	0.143	0.141	0.158	0.194	0.223	0.253
Hollywood Twp.	0.101	0.097	0.101	0.114	0.121	0.135
Hopkins	3.139	3.191	3.296	3.341	3.375	3.467
Hugo	0.877	1.907	2.769	3.631	4.245	4.880
Independence	0.520	0.555	0.597	0.634	0.696	0.740
Inver Grove Heights	3.295	3.465	4.134	4.494	5.040	5.382
Jackson Twp.	0.143	0.144	0.151	0.166	0.019	0.019
Jordan	0.407	0.720	0.830	1.150	1.409	1.675
Lake Elmo	0.973	1.203	1.750	2.168	2.648	3.166
Lakeland	0.312	0.306	0.295	0.291	0.306	0.307
Laketown Twp.	0.292	0.198	0.113	0.040	0.040	0.040
Lakeville	6.519	7.796	9.606	10.263	12.680	13.777
Lexington	0.248	0.258	0.246	0.238	0.256	0.265
Lilydale	0.070	0.082	0.082	0.082	0.087	0.093
Lino Lakes	2.119	2.487	2.758	3.045	3.518	3.913
Linwood Twp.	0.431	0.433	0.440	0.475	0.566	0.622
Long Lake	0.102	0.117	0.119	0.123	0.135	0.147
Loretto	0.064	0.071	0.069	0.065	0.071	0.074
Louisville Twp.	0.142	0.141	0.151	0.168	0.186	0.201
Mahtomedi	0.826	0.822	0.812	0.814	1.002	1.079
Maple Grove	8.181	8.868	9.842	10.326	11.813	13.282
Maple Plain	0.281	0.343	0.346	0.350	0.379	0.394
Marine on St. Croix	0.058	0.067	0.077	0.088	0.101	0.112
Marshan Twp.	5.753	5.753	5.757	5.761	5.771	5.778
May Twp.	0.278	0.289	0.324	0.360	0.410	0.446
Mayer	0.080	0.192	0.395	0.602	0.702	0.794
Medicine Lake	0.033	0.037	0.039	0.041	0.043	0.047

**Table E-5: Total Water Supply Demand Projections by Community
(Million Gallons per Day)**

Water Utility	2004	2010	2020	2030	2040	2050
Medina	0.652	0.815	1.245	1.640	1.979	2.302
Miesville	0.180	0.181	0.181	0.181	0.181	0.182
Minneapolis	73.189	72.876	75.939	77.918	79.950	83.243
Minnnetonka	8.412	8.417	8.021	7.897	8.192	8.484
Minnnetonka Beach	0.099	0.102	0.101	0.097	0.098	0.099
Minnetrista	0.641	0.692	1.269	1.780	1.956	2.261
Mound	0.742	0.792	0.797	0.785	0.821	0.865
Mounds View	1.485	1.492	1.503	1.548	1.675	1.715
New Brighton	4.207	4.282	4.245	4.090	4.186	4.317
New Germany	0.029	0.036	0.049	0.071	0.088	0.104
New Market	0.319	0.317	0.635	0.954	1.153	1.352
New Market Twp.	0.308	0.349	0.422	0.502	0.772	0.917
New Scandia Twp.	0.371	0.407	0.462	0.497	0.535	0.584
New Trier	0.010	0.010	0.010	0.009	0.009	0.009
Newport	0.482	0.490	0.539	0.583	0.730	0.781
Nininger Twp.	0.910	0.912	0.916	0.922	0.931	0.939
North St. Paul	1.223	1.256	1.202	1.202	1.328	1.389
Norwood Young America	0.408	0.532	0.766	0.990	1.238	1.434
Oak Grove	0.851	0.872	0.925	0.952	1.006	1.068
Oak Park Heights	0.889	1.011	0.960	0.960	1.059	1.128
Oakdale	3.127	3.165	3.054	3.053	3.296	3.455
Orono	1.050	1.079	1.199	1.205	1.353	1.432
Osseo	0.318	0.327	0.339	0.370	0.405	0.444
Pine Springs	0.037	0.035	0.033	0.032	0.033	0.032
Plymouth	10.548	10.863	10.753	10.541	11.487	12.054
Prior Lake	2.208	2.922	4.215	4.163	5.116	5.923
Ramsey	3.124	4.899	6.774	6.412	7.722	8.798
Randolph	0.043	0.040	0.040	0.039	0.075	0.084
Randolph Twp.	1.341	1.341	1.342	1.346	1.352	1.357
Ravenna Twp.	0.639	0.645	0.654	0.672	0.692	0.714
Richfield	3.391	3.706	4.060	4.424	4.675	5.084
Robbinsdale	1.550	1.667	1.820	1.809	1.854	1.947
Rogers	1.281	2.832	2.976	4.697	6.342	8.047
Rosemount	9.870	10.291	10.952	11.552	12.353	13.106
San Francisco Twp.	0.082	0.088	0.099	0.108	0.122	0.132
Sand Creek Twp.	0.244	0.245	0.263	0.285	0.357	0.389
Savage	3.232	4.012	4.595	4.751	5.454	6.189
Sciota Twp.	0.763	0.766	0.771	0.778	0.785	0.792
Shakopee PUC	8.620	10.391	11.501	11.636	15.364	17.231
Shoreview	3.234	3.412	3.299	3.128	3.466	3.540
Shorewood	0.940	0.973	0.967	0.952	1.011	1.093
South St. Paul	3.221	3.171	3.027	2.969	3.070	3.171
Spring Lake Park	0.741	0.701	0.666	0.650	0.706	0.704
Spring Lake Twp.	0.344	0.378	0.432	0.486	0.530	0.530

**Table E-5: Total Water Supply Demand Projections by Community
(Million Gallons per Day)**

Water Utility	2004	2010	2020	2030	2040	2050
Spring Park	0.220	0.237	0.256	0.269	0.279	0.298
St. Anthony	0.969	1.070	1.098	1.166	1.288	1.367
St. Bonifacius	0.235	0.289	0.279	0.294	0.339	0.369
St. Francis	0.631	0.746	1.004	1.233	1.505	1.763
St. Lawrence Twp.	0.051	0.057	0.075	0.128	0.180	0.213
St. Louis Park	6.554	6.918	7.237	7.542	7.756	8.152
St. Marys Point	0.030	0.033	0.031	0.030	0.038	0.039
St. Paul Park	2.612	2.886	3.104	3.179	3.305	3.368
St. Paul RWS	62.907	63.904	66.385	69.221	72.817	76.214
Stillwater	2.247	2.485	2.636	2.349	2.588	2.751
Stillwater Twp.	0.229	0.237	0.259	0.295	0.458	0.531
Sunfish Lake	0.047	0.045	0.046	0.047	0.050	0.052
Tonka Bay	0.197	0.222	0.211	0.200	0.215	0.223
Vadnais Heights	1.629	1.574	1.630	1.910	2.183	2.367
Vermillion	0.146	0.151	0.158	0.170	0.189	0.202
Vermillion Twp.	3.839	3.835	3.844	3.857	3.866	3.882
Victoria	0.523	0.995	1.417	1.908	2.219	2.510
Waconia	0.894	1.053	1.987	2.483	2.802	3.051
Waconia Twp.	0.128	0.130	0.140	0.152	0.144	0.144
Waterford Twp.	0.267	0.267	0.269	0.270	0.273	0.275
Watertown	0.333	0.426	0.577	0.683	0.840	0.987
Watertown Twp.	0.170	0.173	0.186	0.202	0.202	0.202
Wayzata	0.889	0.927	0.922	0.913	0.917	0.987
West Lakeland Twp.	0.527	0.530	0.538	0.559	0.605	0.635
White Bear Lake	3.379	3.624	3.692	3.703	3.882	4.065
White Bear Twp.	1.931	2.105	2.184	2.131	2.285	2.436
Woodbury	11.483	12.450	13.701	14.436	15.753	17.384
Young America Twp.	0.076	0.077	0.084	0.106	0.123	0.138
Total	445.640	462.034	496.672	516.103	562.508	602.047

Notes:

Projections were combined for communities that share water supply systems.

Power generation water use is not included in this table.