

2. Population and Water Demand Projections

2.1 Historical Perspective

This section presents the population and water demand projections for Region C as approved by the Texas Water Development Board (TWDB). The section includes a discussion on historical growth trends in Region C, the basis of projections, and the final population and water demand projections for Region C.

The sixteen counties that comprise Region C have been among the fastest growing areas in Texas and the nation since the 1950s. The region's highest population density is centered in and near Dallas and Tarrant Counties. For many years, the population growth in the region was concentrated in the cities of Dallas and Fort Worth. In the 1960s and 1970s, growth spilled over into near suburbs in Dallas and Tarrant Counties. Then in the 1980s and more so in the 1990s and 2000s, the growth spilled into Collin, Denton, Rockwall and Ellis Counties.

According to the U.S. Census Bureau, the year 2000 population of Region C was 5,254,722 ⁽¹⁾. The State Demographer estimated that the July 1, 2006 population of Region C was 6,085,221 ⁽²⁾. The total Region C water demand was 1,380,556 acre-feet ⁽³⁾ in the year 2000 and was 1,404,535 acre-feet ⁽⁴⁾ in the year 2006. Figure 2.1 shows the historical population for Region C from 1900 to 2000 ^(1, 5) as well as the projected populations presented in Section 2.2 of this report. The historical water use for Region C by type of use in 1980, 1990, 2000 and 2006 is presented in Figure 2.2 ⁽⁶⁾.

2.2 Population Projections

Population and water demand projections have been developed for all cities with population over 500 and for any retail water supplier (such as a water supply corporation or a utility district) which provides an annual average of over 0.25 million gallons per day of water supply. This group of entities is collectively referred to as water user groups (WUGs). Any rural population not included in a specific water user group has been included in the "County Other" water user group for each county. Six new water user

Figure 2.1
Historical and Projected Population in Region C

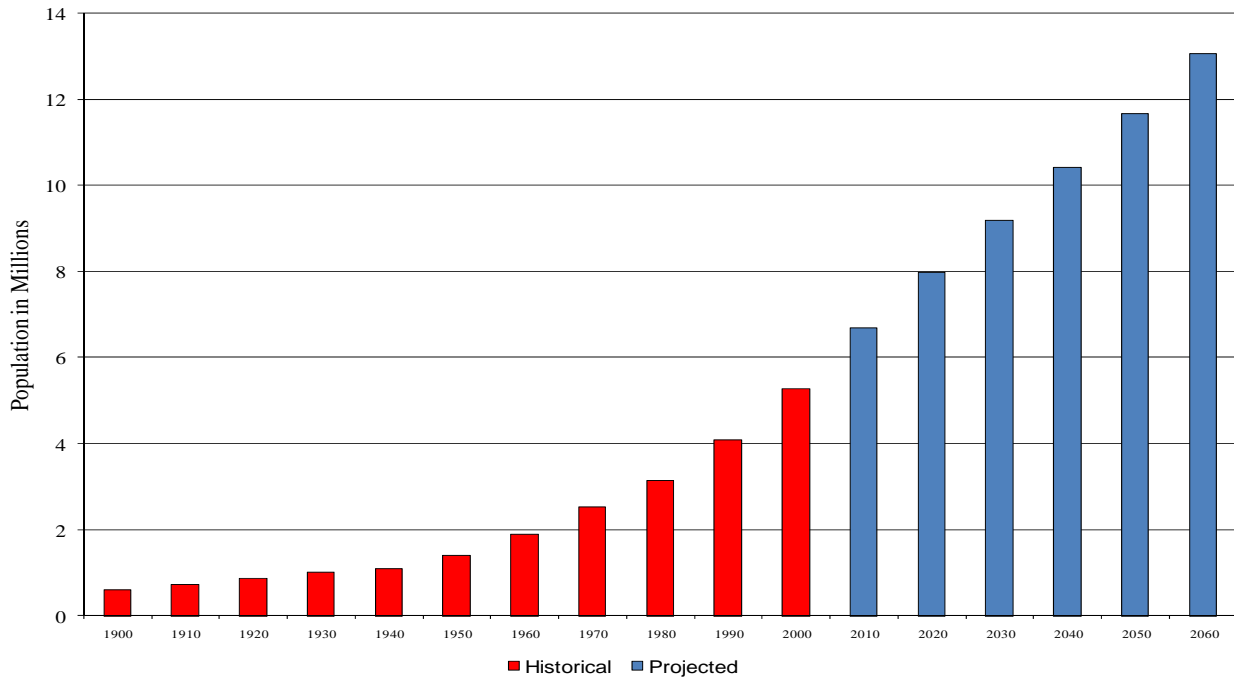
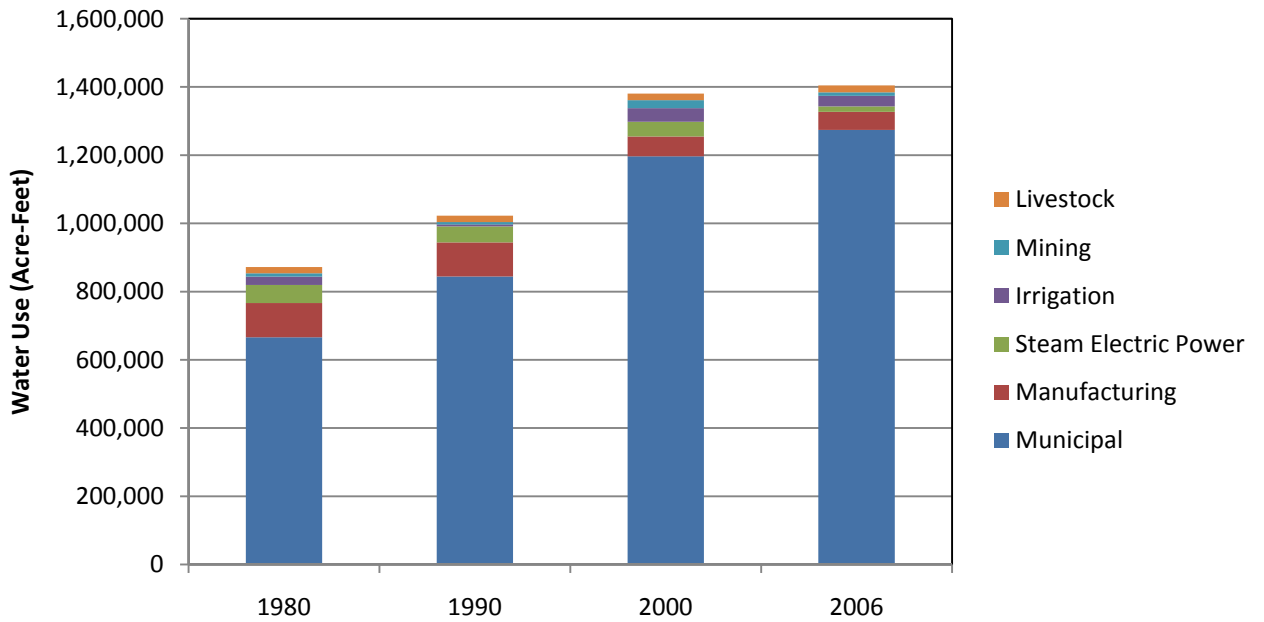


Figure 2.2
Historical Water Use by Category in Region C



groups have been added for this update of the Region C Plan because their populations have recently reached at least 500. There are over 270 municipal water user groups in Region C.

Basis for Population Projections

Population projections presented in this section are based on the population projections from the *2006 Region C Water Plan* ⁽³⁾. Those projections were updated based on suggested changes from the Texas Water Development Board (TWDB) ⁽⁷⁾, recent population estimates from the State Demographer ⁽⁸⁾ and the North Central Texas Council of Governments (NCTCOG) ⁽⁹⁾, input from water user groups, and input from wholesale water providers (WWPs) in Region C. The TWDB provided population projections for the six new water user groups ⁽¹⁰⁾.

The TWDB provided suggested revisions to population projections for 54 WUGs. These suggested revisions were based on year 2007 population estimates from the State Demographer. In cases where the year 2007 population estimate for a WUG exceeded the previous 2010 projected population, TWDB recommended that the population projections be increased. Similarly, the 2009 NCTCOG population estimates were used by Region C consultants to make adjustments to the projections. The growth rate from 2008 to 2009 was applied to the 2009 population to estimate a 2010 population. If the calculated 2010 population was significantly different from the 2010 projection, the projections were adjusted accordingly, either up or down.

Revisions to the projections were also made based on input from water user groups and wholesale water providers in Region C. Each WUG and WWP in Region C was surveyed regarding their population projections. (A copy of this survey is included in Appendix D.) In the survey, each WUG was provided a copy of their population projections from the 2006 Region C Water Plan and asked if they were in agreement with the projections. If the WUG was not in agreement with the projections they were asked to provide alternative projections. Many WUGs responded with suggestions for revisions to the population projections. Additionally, interviews were set up with certain WUGs and WWPs to gather more detailed information. Phone and email correspondence was also used to gather

additional information. The data obtained from all the surveys, interviews, and correspondence was compiled and used to develop a final set of recommended population projections. Appendix E summarizes the adjustments made to the population projections since the *2006 Region C Water Plan*. Email notification was sent to all WUGs for which revisions were proposed. As required by TWDB regulations, these projections were posted for public review on the Region C website well in advance of the Region C Planning Group meeting at which they were considered for approval.

For Region C as a whole, the population projections recommended by Region C and adopted by the TWDB compare very closely with the projections from the *2006 Region C Water Plan*. The revised total population is slightly higher in years 2000 through 2050 and slightly lower in 2060. In general, the projected population increases in future years have shifted from urban areas to areas further from urban centers.

Water User Group Projections

The projected 2060 population for Region C is 13,045,592. This compares very closely to the projected 2060 population from the *2006 Region C Water Plan* of 13,087,849. Texas State Data Center population estimates from 2007 reveal that current population growth in Region C is generally equal to the growth that was projected in the *2006 Region C Water Plan*. Table 2.1 and Figure 2.1 present the projected population for the Region C counties, as adopted by TWDB.

Figure 2.3 shows the historical and projected rate of growth for Region C. This figure shows that the population projections for Region C represent a substantial slowing in the historical rate of growth. Figure 2.4 is a map of the year 2000 historical population and the 2060 projected population by county. Figure 2.5 is a map of the projected percent change in population between years 2000 and 2060 by county. Appendix F includes the projected populations for Region C, by water user group and county, as approved by the TWDB. Many of the water user groups have population that is split among multiple counties and regions. For convenience, Appendix F also includes the total projected populations for those water user groups in multiple basins and counties.

Table 2.1
Adopted County Population Projections for Region C

County	Historical 1990	Historical 2000	2010	2020	2030	2040	2050	2060
Collin	264,036	491,774	790,648	1,046,601	1,265,373	1,526,407	1,761,082	1,938,067
Cooke	30,777	36,363	40,674	46,141	51,749	56,973	65,099	71,328
Dallas	1,852,810	2,218,774	2,512,352	2,756,079	2,950,635	3,128,628	3,365,780	3,695,125
Denton	273,525	432,976	674,322	889,705	1,118,010	1,347,185	1,573,994	1,839,507
Ellis	85,167	111,360	169,514	233,654	293,665	351,919	411,721	471,317
Fannin	24,804	31,242	38,129	42,648	49,775	60,659	74,490	86,970
Freestone	15,818	17,867	19,701	21,826	23,704	25,504	27,148	28,593
Grayson	95,021	110,595	126,099	152,028	179,725	203,822	227,563	253,568
Henderson	41,309	51,984	56,254	65,009	75,232	85,112	96,835	111,026
Jack	6,981	8,763	9,567	10,275	10,915	11,415	11,915	12,415
Kaufman	52,220	71,313	103,249	162,664	208,009	254,609	297,391	349,385
Navarro	39,926	45,124	52,752	58,919	65,331	72,374	80,168	89,638
Parker	64,785	88,495	121,653	193,559	262,053	301,760	324,546	342,887
Rockwall	25,604	43,080	89,144	141,386	171,373	199,044	215,312	232,186
Tarrant	1,170,103	1,446,219	1,800,069	2,061,887	2,337,390	2,646,559	2,964,622	3,353,509
Wise	34,679	48,793	66,366	89,347	108,711	127,068	148,020	170,071
Region C Total	4,077,565	5,254,722	6,670,493	7,971,728	9,171,650	10,399,038	11,645,686	13,045,592

Figure 2.3
Historical and Projected Population Growth Rates by Decade in Region C

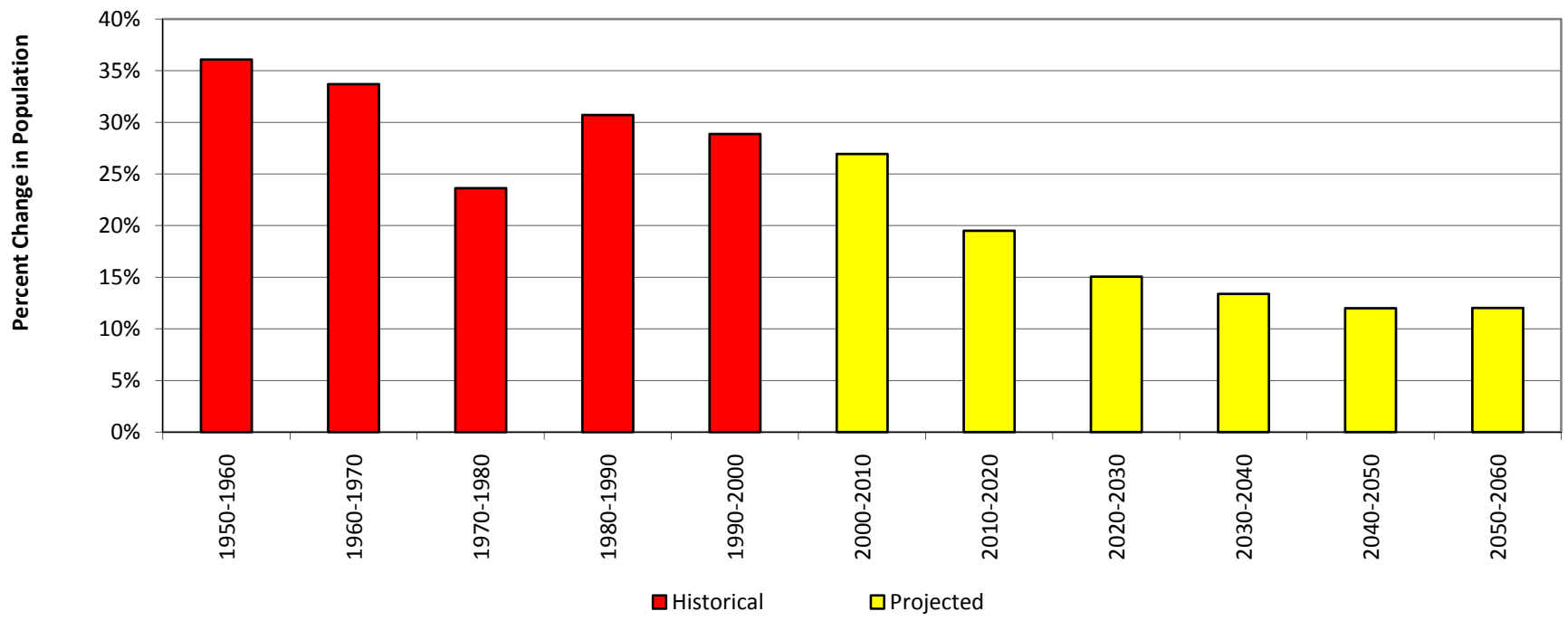
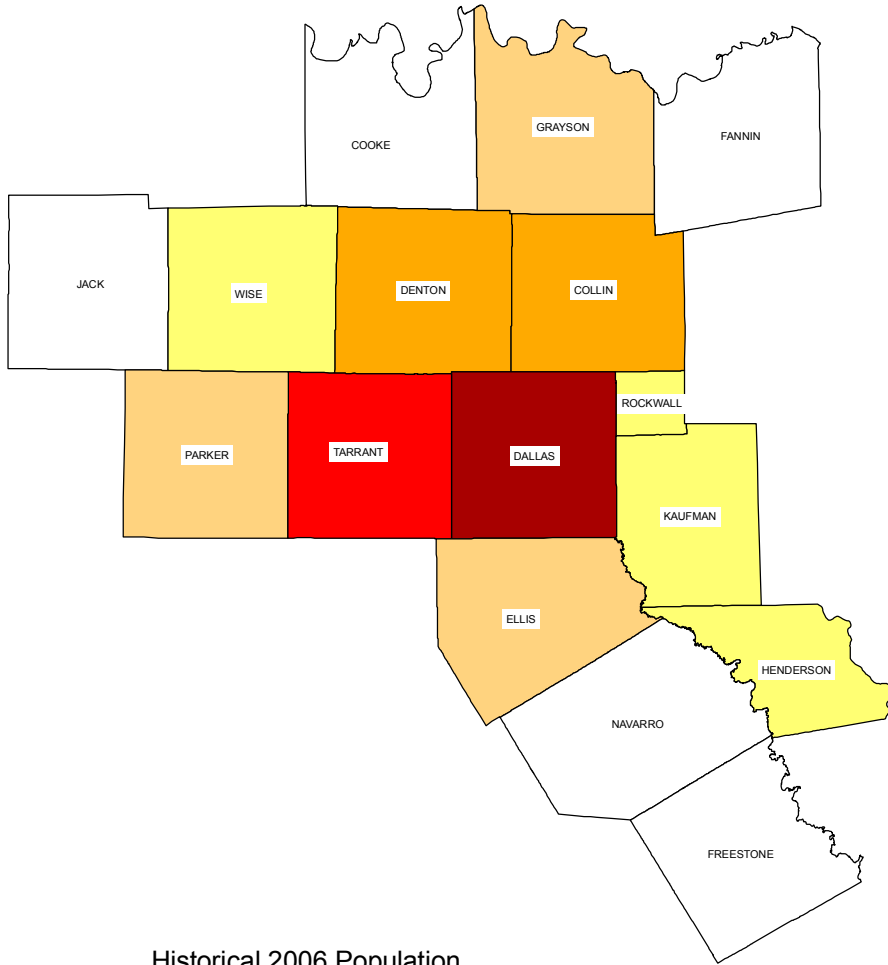
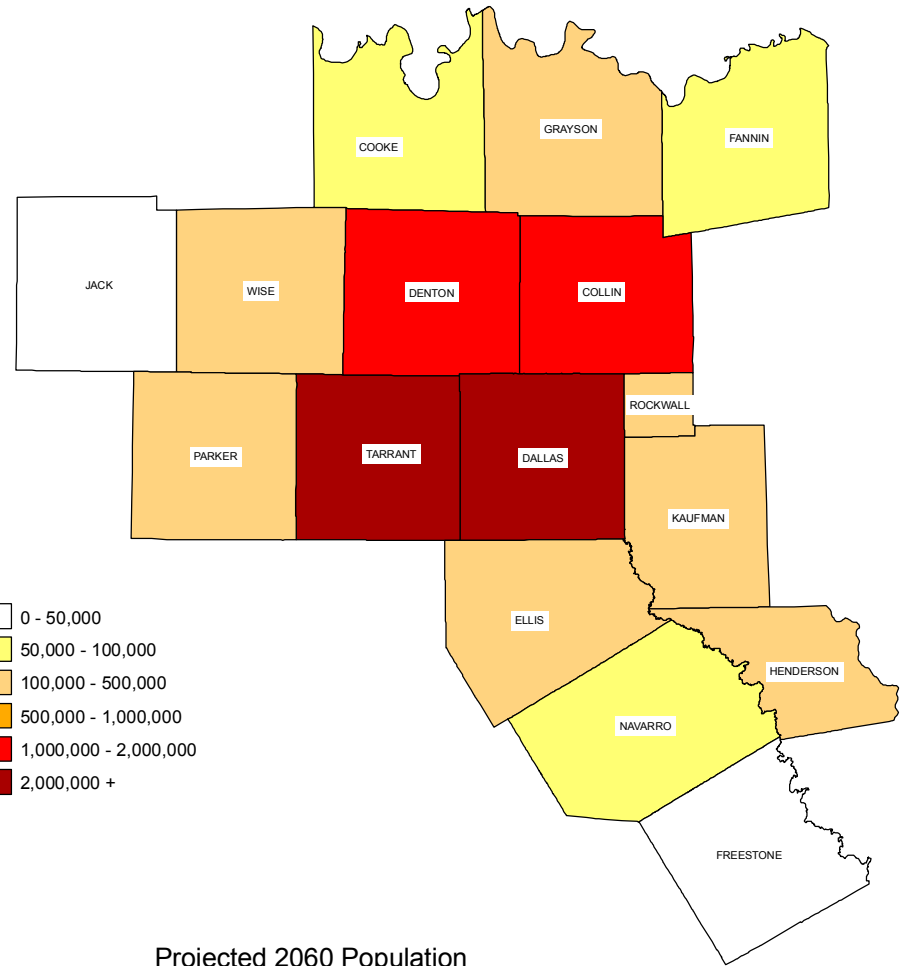


Figure 2.4
Region C Population



Historical 2006 Population



Projected 2060 Population

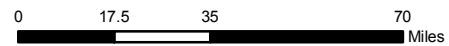
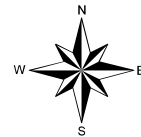
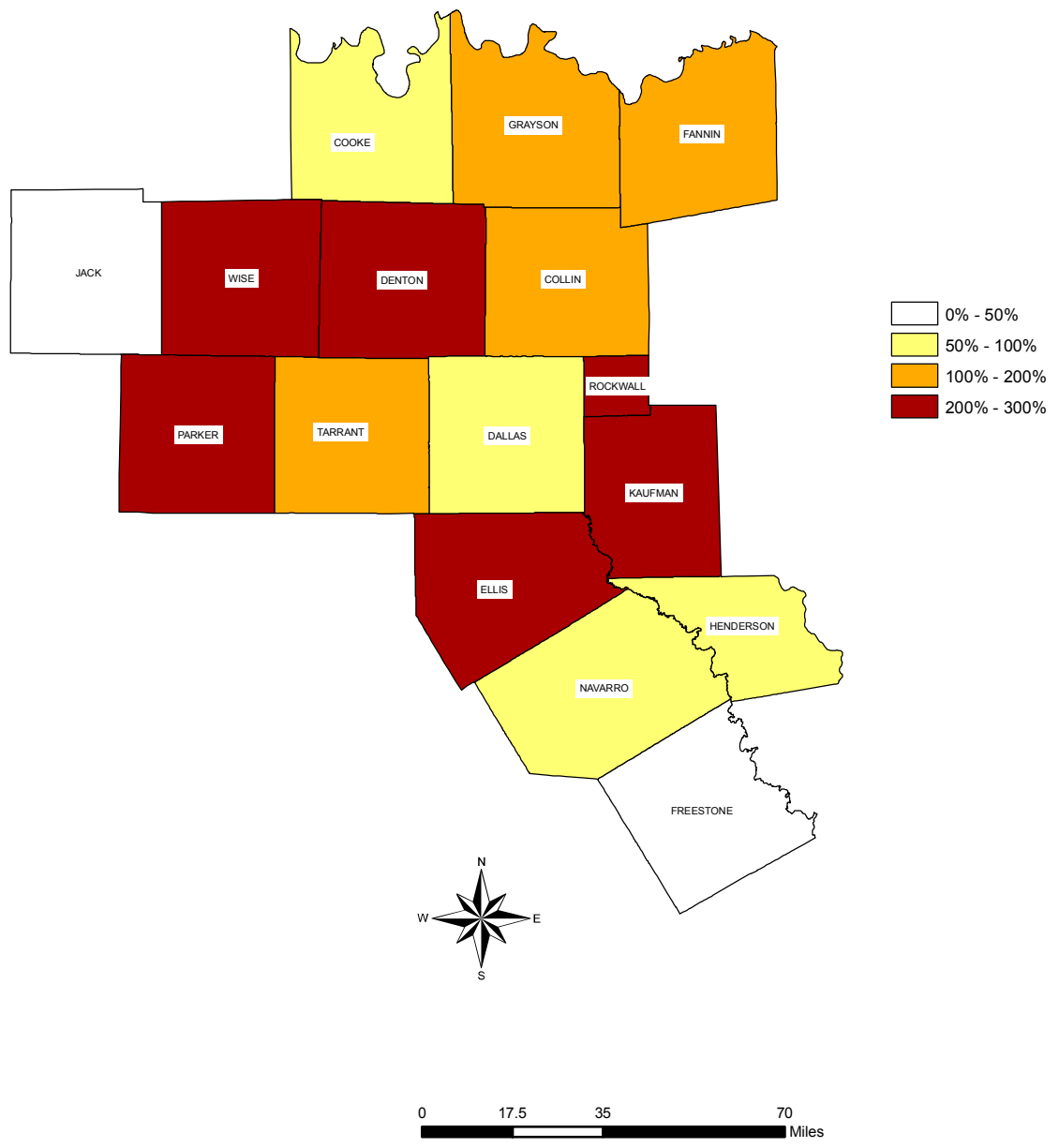


Figure 2.5
Projected 2006 - 2060 Population Increase



2.3 Water Demand Projections

Basis for Water Demand Projections

The municipal water demand projections presented in this section are based on per capita dry-year water use and the adopted population projections from the previous section. The per capita dry-year water uses are based on the per capita water uses from the *2006 Region C Water Plan*, which include water savings from plumbing code requirements for low-flow fixtures. Adjustments to the per capita water uses from the *2006 Region C Water Plan* were made as necessary based on recent historical per capita information from TWDB and on input from water user groups.

Historical per capita water use for each city was obtained from TWDB for the years 1980 through 2006 ⁽⁶⁾. (This information was not available for non-city water user groups.) This historical information was compared to the per capita factors used in the *2006 Region C Water Plan*, and revisions were made as necessary. TWDB provided per capita use projections for the six new water user groups ⁽¹⁰⁾.

In addition, revisions to the demand projections were also made based on input from water user groups and wholesale water providers in Region C. Each WUG and WWP in Region C was surveyed regarding their water use projections. (A copy of this survey is included in Appendix D.) Each WUG was provided a copy of their water use projections from the *2006 Region C Water Plan* and asked if they were in agreement with the projections. If the WUG was not in agreement with the projections they were asked to provide alternative projections. Some WUGs responded with suggestions for revisions to the demand projections. Additionally, interviews were set up with certain WUGs and WWPs to gather more detailed information. Phone and email correspondence was also used to gather additional information. The data obtained from all the surveys, interviews, and correspondence was compiled and used to develop a final set of recommended per capita and demand projections. Appendix E summarizes the adjustments made to the population projections since the *2006 Region C Water Plan*. Email notification was sent to all WUGs for which revisions were proposed. As required by TWDB regulations, these projections were posted for public review on the Region C website well in advance of the Region C Planning Group meeting at which they were considered for approval.

Non-municipal water demand projections include manufacturing, steam-electric-power, irrigation, mining, and livestock, and are reported on a county-wide basis. Projections of the non-municipal water demands were also based on the projections from the *2006 Region C Water Plan*. Projections for manufacturing, irrigation, and livestock did not change from the *2006 Region C Water Plan*. The steam-electric-power demands were revised based on available new information, which included recent power plant development activity, mothballing of existing plants, and the Bureau of Economic Geology report ⁽¹⁰⁾ released in 2008. Appendix E contains a technical memorandum detailing the revisions to steam-electric-power demands for Region C. The mining projections were also revised based on changed conditions. The recent exploration of the Barnett Shale has brought about an increase in mining water use in Region C. The mining projections have been revised to reflect this. Appendix E contains a technical memorandum detailing the revisions to mining demands for Region C.

Water User Group Projections

Table 2.2 presents the historical and projected total water demand for the Region C counties, as adopted by TWDB. The year 2060 projected water demand for Region C is 3,273,461 acre-feet per year. Table 2.3 and Figure 2.6 show the historical and projected water demand for the region by type of use. Additionally, Tables 2.4 through 2.19 show the historical and projected water demand for each Region C County by type of use. Figure 2.7 is a map of the year 2006 historical water usage and the 2060 projected water usage by county. Figure 2.8 is a map of the projected percent change in water demand between years 2006 and 2060 by county. The municipal water demand projections are listed by water user group and by county in Appendix G. Again, for convenience, Appendix G also lists the total projected municipal water demand for those water user groups that are split among multiple basins and counties. The non-municipal water demand projections are also included in Appendix G, both as totals and split by basin.

Figure 2.6
Historical and Adopted Projections for Water Use by Category in Region C

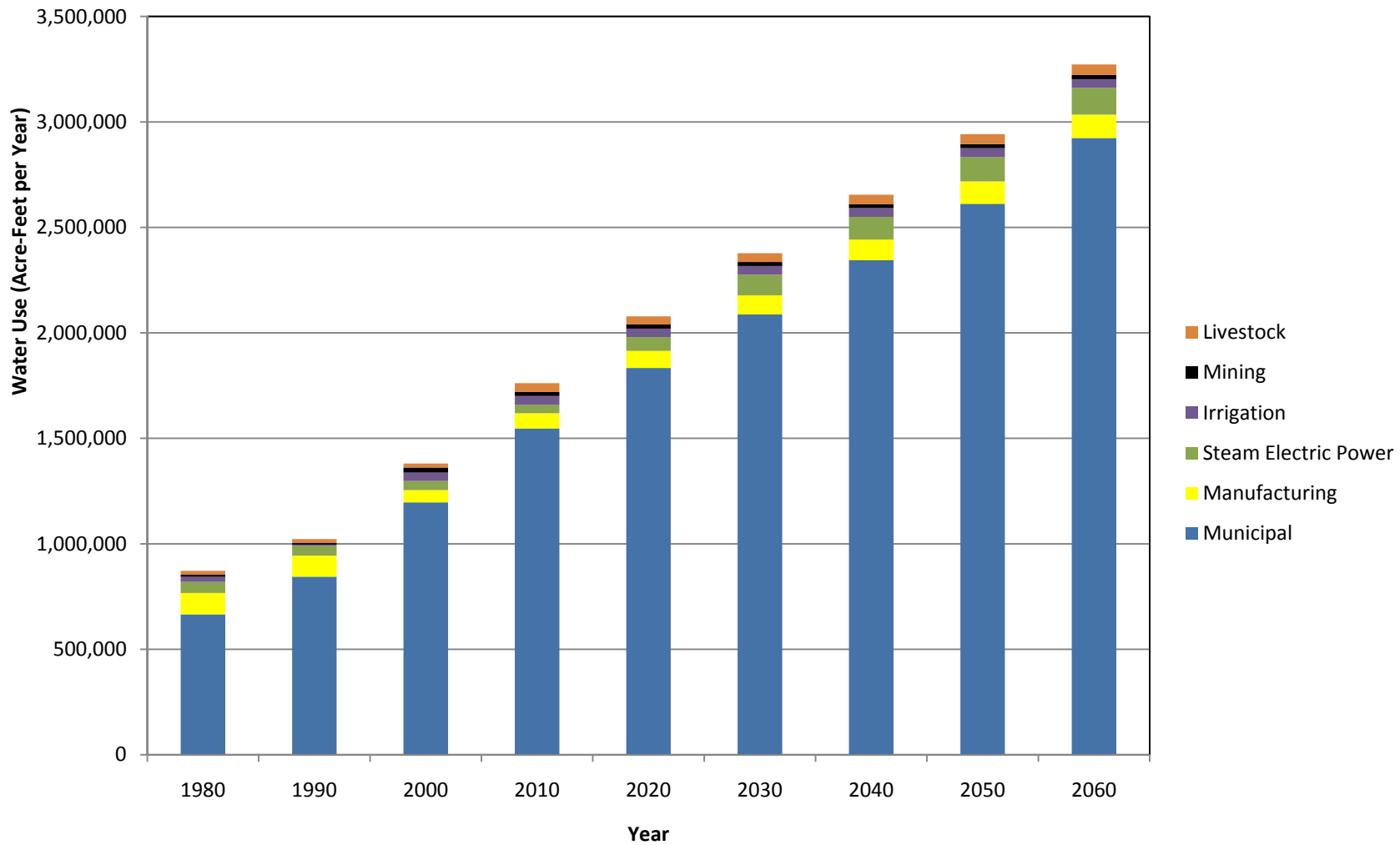


Table 2.2
Adopted County Water Demand Projections for Region C

County	Historical Year 2006 Demand (Acre-Feet)	Projected Water Demand (Acre-Feet per Year)					
		2010	2020	2030	2040	2050	2060
Collin	160,712	217,512	286,372	340,681	405,122	461,762	502,770
Cooke	8,324	9,863	10,870	11,645	12,332	13,426	14,381
Dallas	623,985	691,846	750,995	800,855	842,877	902,496	991,021
Denton	108,894	153,934	201,534	255,146	302,043	348,219	400,618
Ellis	32,980	38,067	49,730	61,287	74,192	87,403	101,095
Fannin	12,191	13,260	19,296	25,691	28,029	31,046	34,063
Freestone	14,797	16,733	23,192	25,765	29,484	33,982	39,396
Grayson	30,953	42,798	51,677	60,588	65,415	70,485	76,742
Henderson	8,343	10,942	12,395	20,591	23,074	25,978	29,342
Jack	2,892	5,515	5,906	6,140	6,366	6,610	6,867
Kaufman	21,683	30,609	43,906	52,411	60,848	68,246	77,308
Navarro	11,184	12,499	21,538	27,883	28,829	29,996	31,482
Parker	21,527	28,760	39,178	51,788	58,543	62,950	66,771
Rockwall	11,907	22,267	35,482	42,571	49,278	52,975	56,463
Tarrant	320,345	423,553	476,587	537,641	604,230	674,652	763,750
Wise	13,818	43,195	50,086	57,055	64,440	72,095	80,392
Region C Total	1,404,535	1,761,353	2,078,744	2,377,738	2,655,102	2,942,321	3,272,461

Table 2.3
Adopted Water Demand Projections for Region C by Type of Use

Use	Historical Year 2006 Demand (Acre-Feet)	Projected Water Demand (Acre-Feet per Year)					
		2010	2020	2030	2040	2050	2060
Municipal	1,274,014	1,546,970	1,833,671	2,087,597	2,344,115	2,612,176	2,924,157
Manufacturing	53,027	72,026	81,273	90,010	98,486	105,808	110,597
Steam Electric Power	15,997	40,813	64,625	98,088	107,394	116,058	126,428
Irrigation	31,067	40,776	40,966	41,165	41,373	41,596	41,831
Mining	10,367	41,520	38,961	41,630	44,486	47,435	50,200
Livestock	20,063	19,248	19,248	19,248	19,248	19,248	19,248
Region C Total	1,404,535	1,761,353	2,078,744	2,377,738	2,655,102	2,942,321	3,272,461

Table 2.4
Adopted Water Demand Projections for Collin County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
		2006	2010	2020	2030	2040	2050
Municipal	156,918	208,914	277,300	330,807	394,532	450,309	490,435
Manufacturing	1,423	3,607	4,137	4,654	5,170	5,633	6,115
Steam-Electric-Power	525	771	715	1,000	1,200	1,600	2,000
Irrigation	938	2,995	2,995	2,995	2,995	2,995	2,995
Mining	0	341	341	341	341	341	341
Livestock	908	884	884	884	884	884	884
Total	160,712	217,512	286,372	340,681	405,122	461,762	502,770

Table 2.5
Adopted Water Demand Projections for Cooke County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	6,265	6,887	7,738	8,547	9,198	10,260	11,177
Manufacturing	121	273	306	335	364	389	421
Steam-Electric-Power	4	0	0	0	0	0	0
Irrigation	300	444	444	444	444	444	444
Mining	268	361	484	421	428	435	441
Livestock	1,366	1,898	1,898	1,898	1,898	1,898	1,898
Total	8,324	9,863	10,870	11,645	12,332	13,426	14,381

Table 2.6
Adopted Water Demand Projections for Dallas County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	584,495	637,815	692,305	731,190	770,064	827,194	915,439
Manufacturing	25,899	34,115	37,791	41,148	44,214	46,703	46,983
Steam-Electric-Power	1,444	3,367	4,290	11,918	12,000	12,000	12,000
Irrigation	11,225	13,087	13,087	13,087	13,087	13,087	13,087
Mining	95	2,980	3,040	3,030	3,030	3,030	3,030
Livestock	827	482	482	482	482	482	482
Total	623,985	691,846	750,995	800,855	842,877	902,496	991,021

Table 2.7
Adopted Water Demand Projections for Denton County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	101,879	147,308	195,457	248,800	295,426	341,350	393,500
Manufacturing	447	1,068	1,239	1,408	1,579	1,731	1,880
Steam-Electric-Power	639	644	744	844	944	1,044	1,144
Irrigation	2,750	2,108	2,108	2,108	2,108	2,108	2,108
Mining	2,019	1,571	751	751	751	751	751
Livestock	1,160	1,235	1,235	1,235	1,235	1,235	1,235
Total	108,894	153,934	201,534	255,146	302,043	348,219	400,618

Table 2.8
Adopted Water Demand Projections for Ellis County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	25,601	31,644	43,456	54,090	64,558	75,654	87,399
Manufacturing	5,931	3,466	3,670	3,841	3,987	4,089	3,912
Steam-Electric-Power	0	981	698	1,450	3,741	5,754	7,878
Irrigation	312	583	583	583	583	583	583
Mining	21	210	140	140	140	140	140
Livestock	1,115	1,183	1,183	1,183	1,183	1,183	1,183
Total	32,980	38,067	49,730	61,287	74,192	87,403	101,095

Table 2.9
Adopted Water Demand Projections for Fannin County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	4,591	6,036	6,961	8,237	10,131	12,608	14,967
Manufacturing	5	73	82	90	98	105	114
Steam-Electric-Power	361	1,261	6,363	11,474	11,910	12,443	13,092
Irrigation	5,567	4,608	4,608	4,608	4,608	4,608	4,608
Mining	6	12	12	12	12	12	12
Livestock	1,661	1,270	1,270	1,270	1,270	1,270	1,270
Total	12,191	13,260	19,296	25,691	28,029	31,046	34,063

Table 2.10
Adopted Water Demand Projections for Freestone County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	2,526	2,908	3,320	3,573	3,811	4,068	4,313
Manufacturing	0	0	0	0	0	0	0
Steam-Electric-Power	9,936	12,173	18,210	20,524	23,999	28,234	33,398
Irrigation	98	8	8	8	8	8	8
Mining	79	116	126	132	138	144	149
Livestock	2,158	1,528	1,528	1,528	1,528	1,528	1,528
Total	14,797	16,733	23,192	25,765	29,484	33,982	39,396

Table 2.11
Adopted Water Demand Projections for Grayson County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	26,000	24,278	28,835	33,513	37,498	41,813	47,013
Manufacturing	2,222	7,010	7,781	8,453	9,088	9,621	10,444
Steam-Electric-Power	0	5,600	8,963	12,326	12,326	12,326	12,326
Irrigation	1,271	3,561	3,751	3,950	4,158	4,381	4,616
Mining	20	1,052	1,050	1,049	1,048	1,047	1,046
Livestock	1,440	1,297	1,297	1,297	1,297	1,297	1,297
Total	30,953	42,798	51,677	60,588	65,415	70,485	76,742

Table 2.12
Adopted Water Demand Projections for Henderson County (Region C) by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	6,633	9,253	10,694	12,277	13,717	15,574	17,894
Manufacturing	479	110	118	133	151	172	195
Steam-Electric-Power	25	460	427	7,000	8,000	9,000	10,000
Irrigation	0	0	0	0	0	0	0
Mining	463	265	302	327	352	378	399
Livestock	743	854	854	854	854	854	854
Total	8,343	10,942	12,395	20,591	23,074	25,978	29,342

Table 2.13
Adopted Water Demand Projections for Jack County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	1,247	1,333	1,396	1,440	1,466	1,510	1,567
Manufacturing	0	2	2	2	2	2	2
Steam-Electric-Power	0	2,162	2,500	2,700	2,900	3,100	3,300
Irrigation	188	0	0	0	0	0	0
Mining	402	993	983	973	973	973	973
Livestock	1,055	1,025	1,025	1,025	1,025	1,025	1,025
Total	2,892	5,515	5,906	6,140	6,366	6,610	6,867

Table 2.14
Adopted Water Demand Projections for Kaufman County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	18,743	16,330	28,552	37,000	45,377	52,709	61,702
Manufacturing	678	760	813	869	928	993	1,061
Steam-Electric-Power	0	8,979	10,000	10,000	10,000	10,000	10,000
Irrigation	179	2,916	2,916	2,916	2,916	2,916	2,916
Mining	0	79	80	81	82	83	84
Livestock	2,083	1,545	1,545	1,545	1,545	1,545	1,545
Total	21,683	30,609	43,906	52,411	60,848	68,246	77,308

Table 2.15
Adopted Water Demand Projections for Navarro County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	8,632	9,695	10,578	11,343	12,150	13,194	14,538
Manufacturing	978	1,172	1,328	1,468	1,607	1,730	1,872
Steam-Electric-Power	0	0	8,000	13,440	13,440	13,440	13,440
Irrigation	100	0	0	0	0	0	0
Mining	0	89	89	89	89	89	89
Livestock	1,474	1,543	1,543	1,543	1,543	1,543	1,543
Total	11,184	12,499	21,538	27,883	28,829	29,996	31,482

Table 2.16
Adopted Water Demand Projections for Parker County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	16,026	19,811	34,297	46,816	53,439	57,735	61,423
Manufacturing	571	779	879	974	1,068	1,150	1,248
Steam-Electric-Power	9	24	22	28	56	75	102
Irrigation	490	422	422	422	422	422	422
Mining	2,652	5,868	1,702	1,692	1,702	1,712	1,720
Livestock	1,779	1,856	1,856	1,856	1,856	1,856	1,856
Total	21,527	28,760	39,178	51,788	58,543	62,950	66,771

Table 2.17
Adopted Water Demand Projections for Rockwall County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	11,732	20,958	34,170	41,256	47,960	51,654	55,139
Manufacturing	33	20	23	26	29	32	35
Steam-Electric-Power	0	0	0	0	0	0	0
Irrigation	0	1,125	1,125	1,125	1,125	1,125	1,125
Mining	0	33	33	33	33	33	33
Livestock	142	131	131	131	131	131	131
Total	11,907	22,267	35,482	42,571	49,278	52,975	56,463

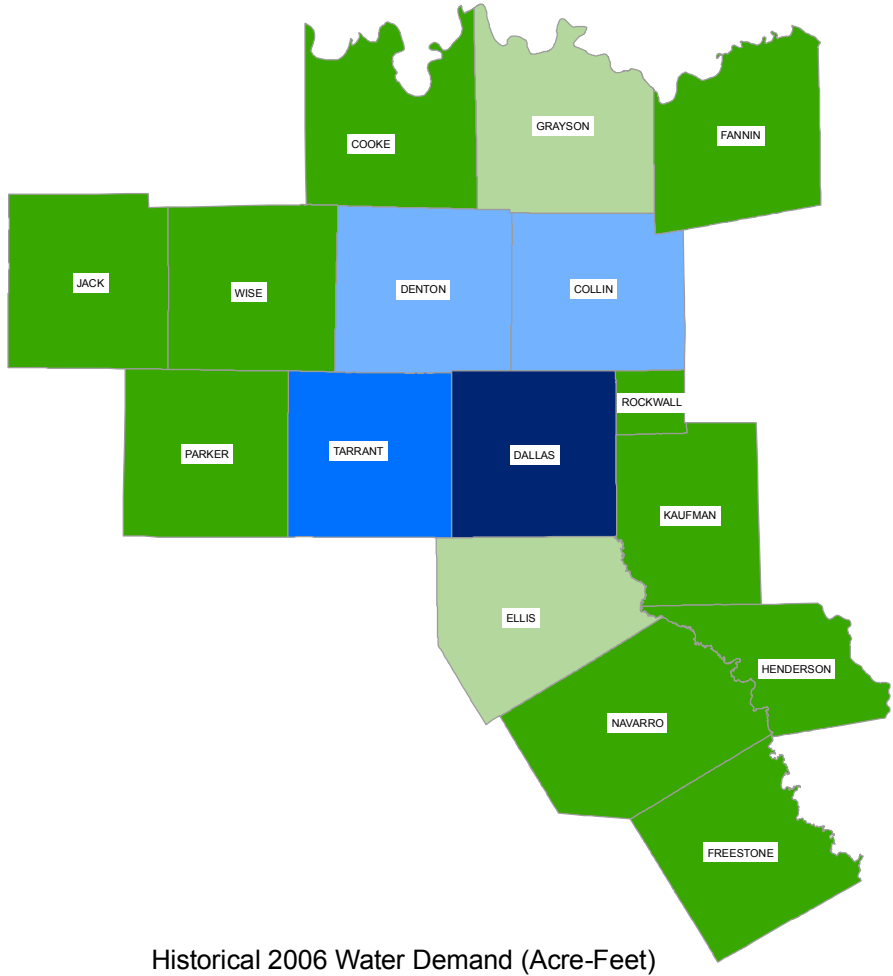
Table 2.18
Adopted Water Demand Projections for Tarrant County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	294,427	393,362	443,571	499,684	562,112	629,504	716,037
Manufacturing	13,297	17,258	20,444	23,630	26,924	29,919	32,457
Steam-Electric-Power	3,054	2,640	2,448	4,168	5,000	5,000	5,000
Irrigation	6,359	8,417	8,417	8,417	8,417	8,417	8,417
Mining	2,494	1,073	904	939	974	1,009	1,036
Livestock	714	803	803	803	803	803	803
Total	320,345	423,553	476,587	537,641	604,230	674,652	763,750

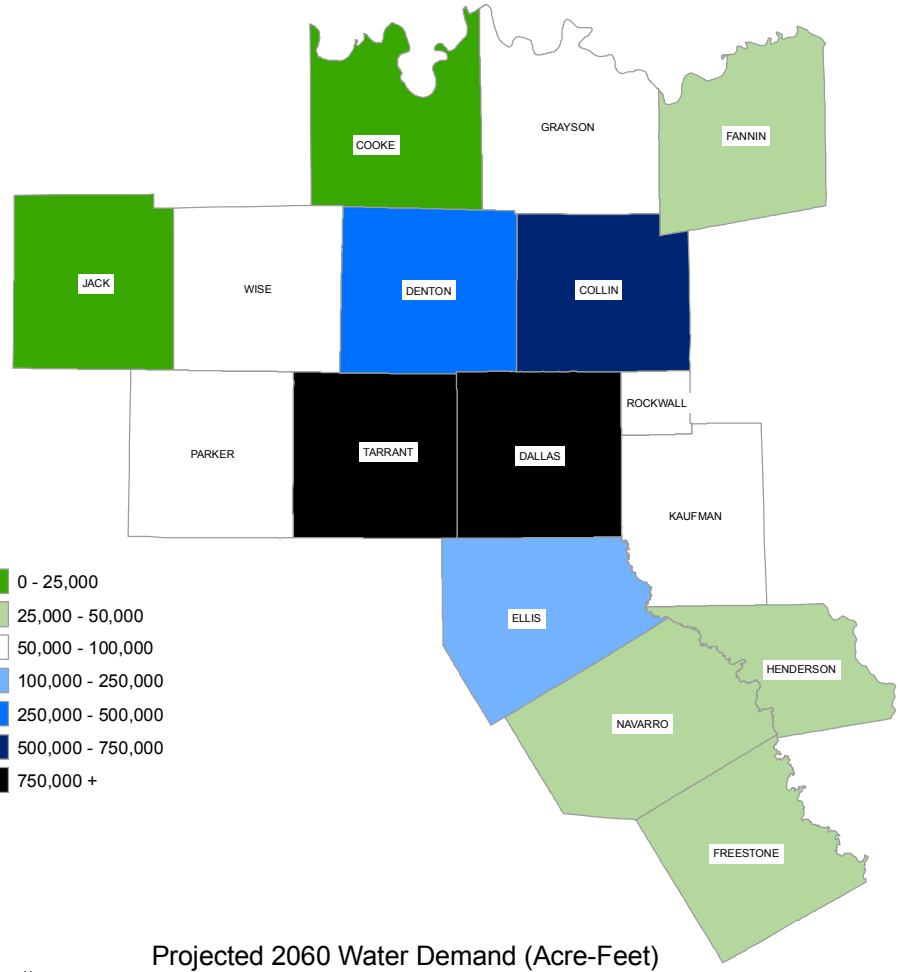
Table 2.19
Adopted Water Demand Projections for Wise County by Type of Use

Type of Use	Historical (Acre-Feet)	Projected (Acre-Feet per Year)					
	2006	2010	2020	2030	2040	2050	2060
Municipal	8,299	10,438	15,041	19,024	22,676	27,040	31,614
Manufacturing	943	2,313	2,660	2,979	3,277	3,539	3,858
Steam-Electric-Power	0	1,751	1,245	1,216	1,878	2,042	2,748
Irrigation	1,290	502	502	502	502	502	502
Mining	1,848	26,477	28,924	31,620	34,393	37,258	39,956
Livestock	1,438	1,714	1,714	1,714	1,714	1,714	1,714
Total	13,818	43,195	50,086	57,055	64,440	72,095	80,392

Figure 2.7
Region C Water Use



Historical 2006 Water Demand (Acre-Feet)



Projected 2060 Water Demand (Acre-Feet)

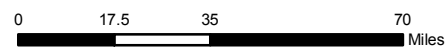
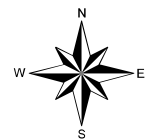
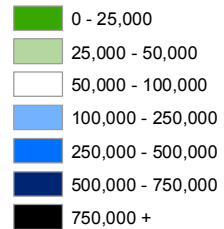
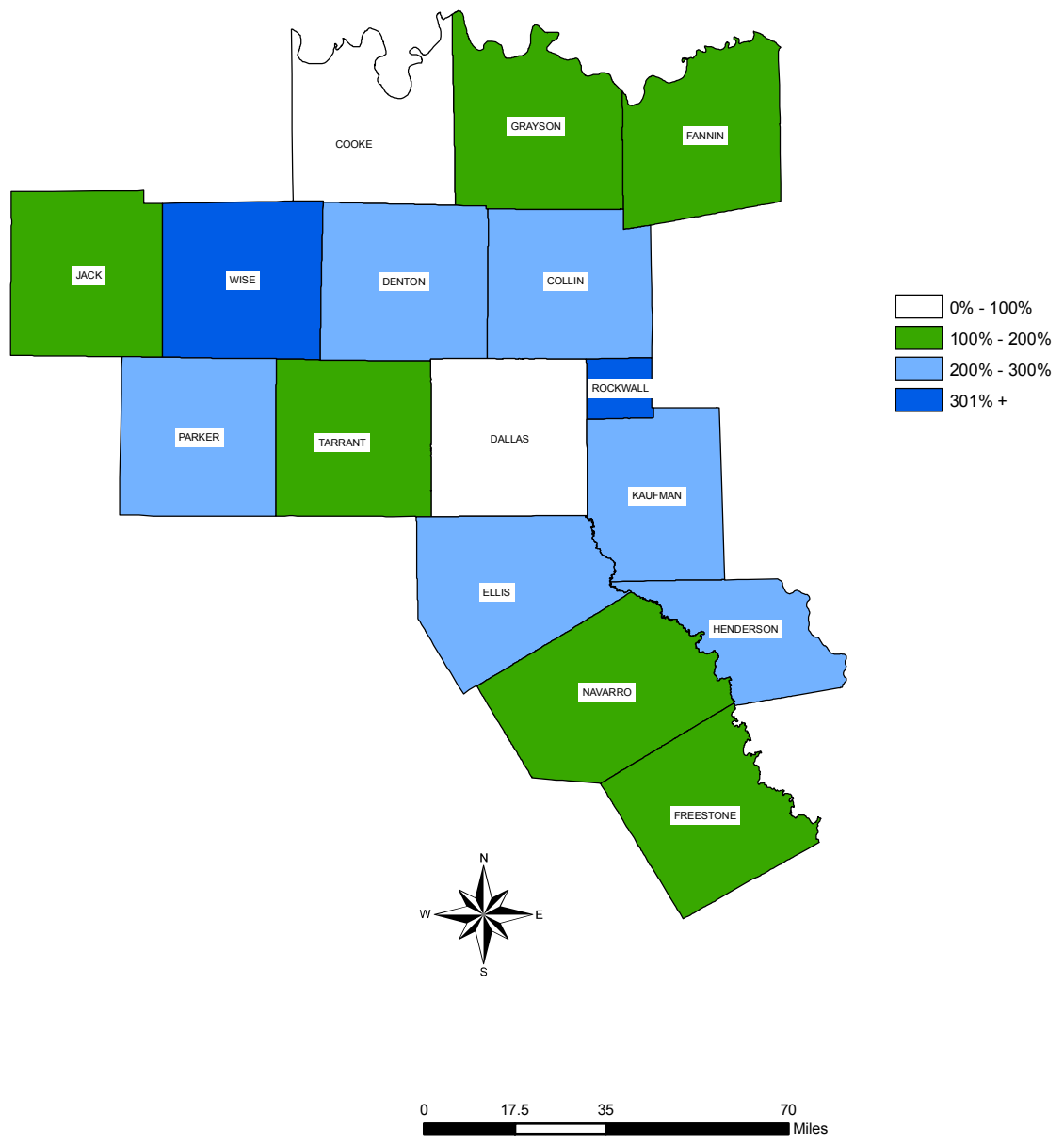


Figure 2.8
Projected 2006 - 2060 Water Use Increase



Input for Future Planning

As required by TWDB guidance, the population and water demand projections were established relatively early in the planning process. As the planning effort proceeded, some water user groups and wholesale water providers offered additional input on population and demand projections. Table 2.20 lists the water suppliers that indicated that their population and/or water demand projections should be different from the TWDB approved projections. This input should be considered carefully in the next round of regional water planning. The entities should be contacted and projections should be adjusted where appropriate.

**Table 2.20
Region C Entities That Requested Adjustments to Population and/or Demand Projections**

Entity	Population		Demand	
	Entity Requested Higher Projections	Entity Requested Lower Projections	Entity Requested Higher Projections	Entity Requested Lower Projections
Crandall	X		X	
East Cedar Creek Fresh Water Supply District		X		X
Ector		X		X
Danville WSC		X		X
Garland				X
Haltom City		X		X
Lindsay	X		X	
Muenster		X		X
South Grayson WSC	X		X	
Tioga		X		X
Tom Bean		X		X
Trenton		X		X
Whitesboro		X		X
Entities Suggesting they become WUGs:				
Rose Hill SUD				
Winkler WSC				

Wholesale Water Provider Projections

Table 2.21 shows the projected demand in Region C by Wholesale Water Provider, and Appendix H includes details on Wholesale Water Provider demand projections, including demand split by county and basin.

Table 2.21
Projected Demands Placed on Wholesale Water Providers

Wholesale Water Provider	Projected Demand (Acre-Feet per Year)					
	2010	2020	2030	2040	2050	2060
City of Arlington	80,186	94,355	99,181	103,374	103,758	104,727
City of Corsicana	10,865	20,384	26,693	27,604	28,750	30,212
City of Dallas (Dallas Water Utilities)	606,630	688,693	732,512	786,911	863,119	994,168
City of Denton	26,138	36,587	47,473	60,214	73,903	100,666
City of Ennis	5,467	6,420	7,638	9,154	11,114	13,645
City of Forney	12,734	16,704	18,344	19,912	21,531	23,357
City of Fort Worth	256,732	314,875	377,372	444,688	523,473	618,676
City of Gainesville	3,619	4,821	5,536	6,283	7,380	8,386
City of Garland (Not including Steam Electric Reuse Demand)	46,392	46,257	47,730	47,881	48,233	48,658
City of Grand Prairie	29,434	40,292	45,452	50,277	55,351	55,351
City of Mansfield	15,487	29,313	38,169	43,106	46,794	50,478
City of Midlothian	7,492	19,374	21,954	24,220	26,713	29,225
City of North Richland Hills	16,278	17,773	18,726	19,254	19,679	20,059
City of Princeton	2,237	4,007	5,496	8,335	12,938	18,636
City of Rockwall	11,553	17,900	21,901	25,466	26,132	26,134
City of Seagoville	2,829	3,920	4,867	5,852	6,934	8,080
City of Sherman	21,030	23,672	26,669	29,842	33,480	38,504
City of Terrell	5,536	12,385	17,046	21,631	24,557	27,931
City of Waxahachie	9,110	11,681	13,851	19,365	25,648	31,320
City of Weatherford	6,269	7,883	9,291	10,607	11,915	13,399
Argyle Water Supply Corporation	2,490	4,161	5,456	5,929	6,483	7,039
Athens Municipal Water Authority	5,466	5,990	6,622	7,339	8,274	9,427
Bartonville Water Supply Corporation	1,662	2,428	2,628	2,730	2,834	2,940
Bolivar Water Supply Corporation	2,038	3,274	5,763	9,796	14,200	18,197
Dallas County Park Cities MUD	15,371	15,858	16,178	16,366	16,548	16,735
Dallas County WCID #6	2,621	2,730	2,805	2,852	2,934	3,028
East Cedar Creek FWSD	2,402	2,843	3,319	3,625	3,991	4,409
Greater Texoma Utility Authority	16,037	30,134	42,683	52,299	63,409	76,316
Lake Cities MUA	2,464	3,094	3,473	3,704	3,689	3,689
Mustang SUD	2,285	4,313	5,493	7,502	9,566	11,660
North Texas Municipal Water District	387,574	492,634	580,720	667,921	736,274	789,676
Rockett SUD	6,010	9,591	11,947	13,214	13,930	14,131

Table 2.21, Continued

Wholesale Water Provider	Projected Demand (Acre-Feet per Year)					
	2010	2020	2030	2040	2050	2060
Sabine River Authority ^a	536,945	516,945	496,946	496,945	496,945	496,945
Sulphur River Water District ^a	33,255	32,870	32,468	32,040	31,556	30,936
Tarrant Regional Water District	448,806	560,680	657,866	754,210	860,389	985,584
Trinity River Authority	107,937	135,520	154,266	166,089	182,022	201,874
Upper Neches Municipal Water Authority ^a	210,135	210,124	210,115	210,106	210,099	210,093
Upper Trinity Regional Water District	34,902	58,104	85,674	110,308	137,411	156,545
Walnut Creek SUD	3,663	5,584	8,588	10,849	12,244	13,588
West Cedar Creek MUD	2,317	3,278	4,089	4,838	5,800	7,013
Wise County WSD	1,755	2,144	2,897	3,701	4,757	5,578

Note: a. These entities are located mostly in other Regions. Demands listed are contractual obligations as provided by Region D and/or Region I. For Sabine River Authority, demand is for the Upper Basin only and included requests for additional water beyond current contracts.

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- (11) Bureau of Economic Geology in conjunction with Texas Water Development Board: *Water Demand Projections for Power Generation in Texas*, 2008.