

#### Section – 3 – Water Supply Models for the next 100 Years

#### Content

- a. 2007 Water Supply Model
- b. 2005 Base Population Projections
- c. 2005 Per Capita Water Use Analysis
- d. 2005 Base for Peak Day Use

#### **Summary**

The water supply model projects when additional water supplies might be necessary. Three models are developed to present a range of years when additional supplies might be necessary. Population growth is the primary factor between the three models. The three models include the following:

- 1. High Range -1.63% population growth for 5 years, 1.2% thereafter.
- 2. Medium Range City Planning Department projections for growth
- 3. Low Range Region O and State of Texas projections for growth.

Based upon the results of all three models, the city staff project a need for water supplies by 2012. For this reason, the time frame for completion of the Lake Alan Henry project is proposed to be completed by 2012. Lake Alan Henry will need to be supplemented by one of the options proposed between the years of 2028-2043. A CRMWA II project could be necessary by 2046 or some later date. By establishing a range, Lubbock can better plan by being ready should population growth continue at a fast pace.

Projections in the model consider both the need to plan for total annual supply and peak day supply. Not only must the city have enough water to maintain a supply throughout the year, the City must also be able to deliver enough water each day to meet peak demand. Annually the City uses about 42,000 acre-feet or 14 billion gallons annually. Peak day use averages about 38 million gallons a day. Winter use might be as low as 22 million gallons per day. Summer use has been as high as 84 million gallons.

The models are presented in charts and graphs in order to present the information in the best manner possible. Along with the 2007 models, there are also some sections from the 2005 Water Plan and Report. The 2005 reports show historical and recent growth patterns in population, variations in annual per capita water use, and peak day use information.

The models use a Total GPCD standard for water supply planning purposes as defined in the TWDB 2004 Water Conservation Implementation Task Force recommendations. A base of 200 gpcd is used in the models for projecting future water demand. This figure is high when compared to the goal set by the Task Force recommendations of 140 gpcd or less. An analysis of Lubbock's total gpcd since 1985 shows that water use by the City does not have a steady or predictable trend. Instead, water use increases and decreases significantly from year to year. Further analysis indicated that Lubbock's high and low patterns of water use closely follow high and low accumulations of annual precipitation.

In cool, wet years, the annual water use has been as low as 160 gpcd. In dry, hot years, annual water use has been as high as 224 gpcd. This swing of 64 gpcd corresponds directly with annual rainfall. On one hot summer day, usage reached 428 gpcd, while on one cold



winter day, usage dropped to 115 gpcd. This variation makes it difficult to plan for annual water supply needs because each year can vary significantly in terms of precipitation. The 200 gpcd base is therefore used to assure enough water to cover most hot, dry years while recognizing that use can and will be lower than that amount in most years.

This variation also makes it difficult to measure the results of conservation efforts. As the City further develops its ability to analyze annual water use, efforts will be made to adjust for the impact of weather to determine actual trends in water use as a result of water conservation efforts and programs, as opposed to trends that may follow precipitation patterns. This will enable the City to fine tune its base per capita use figure and future reductions in per capita water use to meet conservation goals.

In Section 5 of this report the City's water conservation plan is presented. The plan proposes a 1% decrease in water use each year, again, in concert with the recommendations of the Water Conservation Implementation Task Force recommendations. The potential impact of conservation will be added to the model once a method to adjust gpcd for weather variations is developed.

If the City of Lubbock conserves water in the Bailey County Well Field and limits use to 10,000 acre feet annually, then the City is near capacity for annual supply. The City exceeded peak day capacity in 1998, but due to conservation efforts, the City now may have a buffer of about 10 to 15 percent. As the City plans for its future water supply, it is important to note that the City is near peak capacity as presented if the Bailey County Well Field is conserved.

The model can be updated as necessary with changes to model assumptions. Bruce Blalack, the Water Superintendent for the City of Lubbock, has played a major role in developing and preparing the water models.

# Section 3 – Water Supply Models for the next 100 Years

a. 2007 Water Supply Model

# 100-YEAR WATER MODEL SUMMARY SCENARIO 2007

VARIABLES/ASSUMPTIONS		SCENARIO 2007
HIGH RANGE WATER DEMAND PROJECTIONS		
WATER DEMAND PROJECTIONS BASED ON AVERAGE ANNUAL GALLONS PER CAPITA PER DAY (GPCPD) OF:		200
ANNUAL POPULATION PROJECTIONS - HIGH RANGE - 1.63% FOR 5 YEARS, 1.20% THEREAFTER	POPULATION OPTION:	3
MEDIUM RANGE WATER DEMAND PROJECTIONS		
WATER DEMAND PROJECTIONS BASED ON AVERAGE ANNUAL GALLONS PER CAPITA PER DAY (GPCPD) OF:		200
ANNUAL POPULATION PROJECTIONS - MEDIUM RANGE - CITY PLANNING ESTIMATES	POPULATION OPTION:	2
LOW RANGE WATER DEMAND PROJECTIONS		
WATER DEMAND PROJECTIONS BASED ON AVERAGE ANNUAL GALLONS PER CAPITA PER DAY (GPCPD) OF:		200
ANNUAL POPULATION PROJECTIONS - LOW RANGE - REGION O WATER PLAN/TWDB ESTIMATES	POPULATION OPTION:	1
AVERAGE ANNUAL PERCENT REDUCTION DUE TO WATER SAVING FIXTURES OF:		0.00%

HIGH RANGE WATER DEMAND PROJECTIONS	YEAR
YEAR CITY IRRIGATION SUPPLY NEEDED	2006
YEAR LAKE ALAN HENRY SUPPLY NEEDED	2012
YEAR REUSE WATER SUPPLY NEEDED	2028
YEAR POST RESERVOIR SUPPLY NEEDED	2037
YEAR CRMWA II WATER SUPPLY NEEDED	2046
YEAR MAXIMUM DAY REACHES 82 MGD	2009

MEDIUM RANGE WATER DEMAND PROJECTIONS	YEAR
YEAR CITY IRRIGATION SUPPLY NEEDED	2006
YEAR LAKE ALAN HENRY SUPPLY NEEDED	2012
YEAR REUSE WATER SUPPLY NEEDED	2043
YEAR POST RESERVOIR SUPPLY NEEDED	>2105
YEAR CRMWA II WATER SUPPLY NEEDED	>2105
YEAR MAXIMUM DAY REACHES 82 MGD	2013

LOW RANGE WATER DEMAND PROJECTIONS	YEAR
YEAR CITY IRRIGATION SUPPLY NEEDED	2006
YEAR LAKE ALAN HENRY SUPPLY NEEDED	2012
YEAR REUSE WATER SUPPLY NEEDED	2054
YEAR POST RESERVOIR SUPPLY NEEDED	>2105
YEAR CRMWA II WATER SUPPLY NEEDED	>2105
YEAR MAXIMUM DAY REACHES 82 MGD	2014

## 100-YEAR WATER DEMAND AND SUPPLY MODEL

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ANAMAL POPULATION PROJECTIONS - MICHAEL - MARKE - LAW - MERICAN - LAW					HIGH RANG	SE WATER DEN	MAND PROJEC	TIONS							
MEDIUM RANGE WATER DEMAND PROJECTIONS BASED ON AVERAGE ANNUAL GALLOSS PER CAPITA PER DAY (POPP) DF:	WATER DEM	AND PROJECTION	S BASED ON AVE	RAGE ANNUAL GAL	LONS PER CAPITA	PER DAY (GPCPD	) OF:					200			
MATER DIAMNO PROJECTIONS BASED ON NERADEA PANNIAL GALLONS PER CAPITA PER DAY (POPPLY) OF:	ANNUAL PO	PULATION PROJEC	CTIONS -	HIGH RANGE - 1.63	% FOR 5 YEARS, 1	.20% THEREAFTEI	R			POPULATION OPTIC	ON:	3			
NAMERICATION PROJECTIONS   SECTION PROJECTIONS   SECTION   SECTI					MEDIUM RAN	IGE WATER DE	MAND PROJE	CTIONS							
NAMERICATION PROJECTIONS   SECTION PROJECTIONS   SECTION   SECTI	WATER DEM	IAND PROJECTION	IS BASED ON AVE	RAGE ANNUAL GAL	LONS PER CAPITA	PER DAY (GPCPD	) OF:					200			
AVERAGE ANNUAL PERCENT REDUCTIONS BASED ON AVERAGE ANNUAL CALLONS PER CAPITA FER DAY (POPPLY) FAR PER DAY (POPPLY) FER PER DAY (POPPL	CALL CONTRACTOR OF THE						,		I	POPULATION OPTIC	NI:				
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NERGE ANNUAL PRECEITONS   DOWNAMER   REGION WATER PLANTINGS   ESTIMATES															
POPULATION															
POPULATION   HIGH   MEDIUM   LOW   RANGE   R	ANNUAL PO	To definition of hor.													
POPULATION	AVERAGE A	AGE ANNUAL PERCENT REDUCTION DUE WATER SAVING FIXTURES OF:													
LUBBOCK   RANGE   PANSE   PA															
PLUS   WATER   WATER   WATER   WATER   CRMWA   COUNTY   WELL   WELL   WATER   CUSTOMERS   COUNTY   COUNTY   WELL   WELL   WATER   SUPPLY   SUPPLY   CACRE FEET)   WATER   SUPPLY   WATER   SUPPLY   CACRE FEET)   WATER   SUPPLY   WATER   WATER   WATER   WATER   WATER   WATER   SUPPLY   WATER															
WHOLESALE   DEMAND   DEMAND   DEMAND   SUPPLY   SUPPLY   SUPPLY   SUPPLY   SUPPLY   CACRE FEET)   (ACRE FEET)															
YEAR CUSTOMERS (ACRE FEET) (AC									7 7						
2000   203,484   44,996   44,996   44,996   37,511   7,439   7,516   6,882	VEAD														
2001   205,402   44,398								(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)			
2002   207,399   42,561   42,561   42,561   34,380   8,181															
2003   209,357   44,515   44,515   36,666   7,948															
2004         211,348         37,949         37,949         27,646         10,403           2006         213,390         39,988         39,988         39,988         39,988         39,988         39,988         39,988         39,988         39,988         39,988         39,988         39,988         33,187         6,801         0         <															
2005         213,390         39,988         39,988         33,187         6,801           2006         215,533         48,286         48,286         48,286         33,352         11,773         400         0<															
2006         215,533         48,286         48,286         33,352         14,734         200         0         0         0         0           2007         219,041         49,072         48,582         48,630         31,499         17,173         400         0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>gara control con con-</td><td></td><td></td><td></td><td>Christian and the state of the</td></td<>								gara control con con-				Christian and the state of the			
2007         219,041         49,072         48,682         48,630         31,499         17,173         400         0         0         0         0           2008         222,607         49,870         48,880         48,976         25,000         24,270         600         0								200	0	0	0	0			
2008         222,607         48,870         48,880         48,976         25,000         24,270         600         0         0         0         0           2009         226,230         50,682         49,180         49,326         36,000         13,882         800         0															
2009         226,230         50,682         49,180         49,326         36,000         13,882         800         0         0         0         0           2010         229,913         51,507         49,469         49,662         36,000         14,507         1,000         0	-														
2010   229 913   51,507   49,469   49,662   36,000   14,507   1,000   0   0   0   0   0   0   0   0   0															
2011         233,656         52,346         49,826         49,923         36,000         15,146         1,200         0         0         0         0           2012         236,456         52,973         50,186         50,187         36,000         10,000         1,400         5,573         0         0         0           2014         239,290         53,608         50,548         50,452         36,000         10,000         1,600         6,008         0         0         0           2014         242,158         54,250         50,913         50,719         36,000         10,000         1,800         6,450         0         0         0           2015         245,060         54,901         51,280         50,987         36,000         10,000         1,800         7,101         0         0         0           2016         247,997         55,559         51,558         51,257         36,000         10,000         1,800         7,759         0         0         0         0           2017         259,970         56,224         52,023         51,528         36,000         10,000         1,800         8,424         0         0         0         0 <td>2010</td> <td></td>	2010														
2012         236,486         52,973         50,186         50,187         36,000         10,000         1,400         5,573         0         0         0           2013         239,290         53,608         50,548         50,452         36,000         10,000         1,600         6,008         0         0         0         0           2014         242,158         54,250         50,913         50,719         36,000         10,000         1,800         6,450         0         0         0           2015         245,080         54,901         51,280         50,987         36,000         10,000         1,800         7,101         0         0         0           2016         247,997         55,559         51,650         51,257         36,000         10,000         1,800         7,759         0         0         0         0           2017         250,970         56,224         52,023         51,528         36,000         10,000         1,800         9,780         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td>2011</td> <td></td>	2011														
2013         239,290         53,608         50,548         50,452         36,000         10,000         1,600         6,008         0         0         0           2014         242,158         54,250         50,913         50,719         36,000         10,000         1,800         7,101         0         0         0         0           2016         245,060         54,901         51,280         50,987         36,000         10,000         1,800         7,101         0         0         0           2016         247,997         55,559         51,650         51,257         36,000         10,000         1,800         7,759         0         0         0         0           2017         250,970         56,224         52,023         51,528         36,000         10,000         1,800         8,424         0	2012	236,456	52,973	50,186	50,187	36,000			5,573						
2015         245,060         54,901         51,280         50,987         36,000         10,000         1,800         7,101         0         0         0           2016         247,997         55,559         51,650         51,257         36,000         10,000         1,800         7,759         0         0         0           2017         250,970         56,224         52,023         51,528         36,000         10,000         1,800         8,424         0         0         0           2018         253,978         56,898         52,398         51,801         36,000         10,000         1,800         9,988         0         0         0         0           2019         257,022         57,580         52,776         52,076         36,000         10,000         1,800         9,780         0         0         0           2020         260,102         58,270         53,039         52,290         36,000         10,000         1,800         9,780         0         0         0           2021         263,220         58,969         53,365         52,463         36,000         10,000         1,800         11,876         0         0         0 <td< td=""><td>2013</td><td>239,290</td><td>53,608</td><td>50,548</td><td>50,452</td><td>36,000</td><td></td><td>1,600</td><td>6,008</td><td>0</td><td>0</td><td>0</td></td<>	2013	239,290	53,608	50,548	50,452	36,000		1,600	6,008	0	0	0			
2016         247,997         55,559         51,650         51,257         36,000         10,000         1,800         7,759         0         0         0           2017         250,970         56,224         52,023         51,528         36,000         10,000         1,800         8,424         0         0         0         0           2018         253,978         56,898         52,398         51,801         36,000         10,000         1,800         9,908         0         0         0           2019         257,022         57,580         52,776         52,076         36,000         10,000         1,800         9,780         0         0         0           2020         260,102         58,270         53,039         52,290         36,000         10,000         1,800         10,470         0         0         0           2021         263,220         58,969         53,365         52,463         36,000         10,000         1,800         11,169         0         0         0         0           2022         266,375         59,676         53,694         52,812         36,000         10,000         1,800         11,876         0         0         <	2014	242,158	54,250	50,913	50,719	36,000	10,000	1,800	6,450	0	0	0			
2017         250,970         56,224         52,023         51,528         36,000         10,000         1,800         8,424         0         0         0           2018         253,978         56,898         52,398         51,801         36,000         10,000         1,800         9,098         0         0         0           2019         257,022         57,580         52,776         52,076         36,000         10,000         1,800         9,780         0         0         0           2020         260,102         58,270         53,039         52,290         36,000         10,000         1,800         10,470         0         0         0         0           2021         263,220         58,969         53,365         52,463         36,000         10,000         1,800         11,169         0         0         0           2022         266,375         59,676         53,694         52,637         36,000         10,000         1,800         11,876         0         0         0         0           2023         269,568         60,391         54,024         52,812         36,000         10,000         1,800         12,591         0         0	2015			51,280	50,987	36,000	10,000	1,800	7,101	0	0	0			
2018         253,978         56,898         52,398         51,801         36,000         10,000         1,800         9,098         0         0         0           2019         257,022         57,580         52,776         52,076         36,000         10,000         1,800         9,780         0         0         0           2020         260,102         58,270         53,039         52,290         36,000         10,000         1,800         10,470         0         0         0           2021         263,220         58,969         53,365         52,463         36,000         10,000         1,800         11,169         0         0         0         0           2022         266,375         59,676         53,694         52,637         36,000         10,000         1,800         11,876         0         0         0         0           2023         269,568         60,391         54,024         52,812         36,000         10,000         1,800         12,591         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	THE RESERVE THE PERSON NAMED IN COLUMN 2 IS NOT THE PERSON NAMED I					36,000		1,800	7,759	0	0	0			
2019         257,022         57,580         52,776         52,076         36,000         10,000         1,800         9,780         0         0         0           2020         260,102         58,270         53,039         52,290         36,000         10,000         1,800         10,470         0         0         0           2021         263,220         58,969         53,365         52,463         36,000         10,000         1,800         11,169         0         0         0           2022         266,375         59,676         53,694         52,637         36,000         10,000         1,800         11,876         0         0         0           2023         269,568         60,391         54,024         52,812         36,000         10,000         1,800         12,591         0         0         0           2024         272,799         61,115         54,357         52,988         36,000         10,000         1,800         13,315         0         0         0           2025         276,069         61,847         54,692         53,164         36,000         10,000         1,800         14,047         0         0         0										0	0	0			
2020         260,102         58,270         53,039         52,290         36,000         10,000         1,800         10,470         0         0         0           2021         263,220         58,969         53,365         52,463         36,000         10,000         1,800         11,169         0         0         0         0           2022         266,375         59,676         53,694         52,637         36,000         10,000         1,800         11,876         0         0         0         0           2023         269,568         60,391         54,024         52,812         36,000         10,000         1,800         12,591         0										0	0	0			
2021         263,220         58,969         53,365         52,463         36,000         10,000         1,800         11,169         0         0           2022         266,375         59,676         53,694         52,637         36,000         10,000         1,800         11,876         0         0         0           2023         269,568         60,391         54,024         52,812         36,000         10,000         1,800         12,591         0         0         0           2024         272,799         61,115         54,357         52,988         36,000         10,000         1,800         13,315         0         0         0           2025         276,069         61,847         54,692         53,164         36,000         10,000         1,800         14,047         0         0         0           2026         279,378         62,589         55,028         53,342         36,000         10,000         1,800         14,789         0         0         0           2027         282,727         63,339         55,367         53,520         36,000         10,000         1,800         16,000         298         0         0           2028															
2022         266,375         59,676         53,694         52,637         36,000         10,000         1,800         11,876         0         0         0           2023         269,568         60,391         54,024         52,812         36,000         10,000         1,800         12,591         0         0         0           2024         272,799         61,115         54,357         52,988         36,000         10,000         1,800         13,315         0         0         0           2025         276,069         61,847         54,692         53,164         36,000         10,000         1,800         14,047         0         0         0           2026         279,378         62,589         55,028         53,342         36,000         10,000         1,800         14,789         0         0         0           2027         282,727         63,339         55,367         53,520         36,000         10,000         1,800         15,539         0         0         0           2028         286,116         64,098         55,708         53,698         36,000         10,000         1,800         16,000         298         0         0         0															
2023         269,568         60,391         54,024         52,812         36,000         10,000         1,800         12,591         0         0         0           2024         272,799         61,115         54,357         52,988         36,000         10,000         1,800         13,315         0         0         0         0           2025         276,069         61,847         54,692         53,164         36,000         10,000         1,800         14,047         0         0         0         0           2026         279,378         62,589         55,028         53,342         36,000         10,000         1,800         14,789         0															
2024         272,799         61,115         54,357         52,988         36,000         10,000         1,800         13,315         0         0         0           2025         276,069         61,847         54,692         53,164         36,000         10,000         1,800         14,047         0         0         0           2026         279,378         62,589         55,028         53,342         36,000         10,000         1,800         14,789         0         0         0           2027         282,727         63,339         55,367         53,520         36,000         10,000         1,800         15,539         0         0         0           2028         286,116         64,098         55,708         53,699         36,000         10,000         1,800         16,000         298         0         0           2029         289,546         64,867         56,051         53,878         36,000         10,000         1,800         16,000         1,067         0         0           2030         293,017         65,644         56,304         54,024         36,000         8,000         1,800         16,000         3,844         0         0      <															
2025         276,069         61,847         54,692         53,164         36,000         10,000         1,800         14,047         0         0         0           2026         279,378         62,589         55,028         53,342         36,000         10,000         1,800         14,789         0         0         0           2027         282,727         63,339         55,367         53,520         36,000         10,000         1,800         15,539         0         0         0           2028         286,116         64,098         55,708         53,699         36,000         10,000         1,800         16,000         298         0         0           2029         289,546         64,867         56,051         53,878         36,000         10,000         1,800         16,000         298         0         0           2030         293,017         65,644         56,304         54,024         36,000         8,000         1,800         16,000         3,844         0         0           2031         296,530         66,431         56,592         54,133         36,000         8,000         1,800         16,000         4,631         0         0					THE RESERVE THE PERSON NAMED IN COLUMN 2 IS NOT THE PERSON NAMED I										
2026         279,378         62,589         55,028         53,342         36,000         10,000         1,800         14,789         0         0         0           2027         282,727         63,339         55,367         53,520         36,000         10,000         1,800         15,539         0         0         0           2028         286,116         64,098         55,708         53,699         36,000         10,000         1,800         16,000         298         0         0           2029         289,546         64,867         56,051         53,878         36,000         10,000         1,800         16,000         298         0         0           2030         293,017         65,644         56,304         54,024         36,000         8,000         1,800         16,000         3,844         0         0           2031         296,530         66,431         56,592         54,133         36,000         8,000         1,800         16,000         4,631         0         0           2032         300,085         67,228         56,881         54,242         36,000         8,000         1,800         16,000         5,428         0         0	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN THE PERSON NAMED IN COLUMN TWO IS NAMED IN THE PERSON NAMED														
2027         282,727         63,339         55,367         53,520         36,000         10,000         1,800         15,539         0         0         0           2028         286,116         64,098         55,708         53,699         36,000         10,000         1,800         16,000         298         0         0           2029         289,546         64,867         56,051         53,878         36,000         10,000         1,800         16,000         1,067         0         0           2030         293,017         65,644         56,304         54,024         36,000         8,000         1,800         16,000         3,844         0         0           2031         296,530         66,431         56,592         54,133         36,000         8,000         1,800         16,000         4,631         0         0           2032         300,085         67,228         56,881         54,242         36,000         8,000         1,800         16,000         5,428         0         0           2033         303,682         68,033         57,171         54,352         36,000         8,000         1,800         16,000         6,233         0         0 </td <td></td> <td></td> <td></td> <td>THE RESERVE THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				THE RESERVE THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER.											
2028         286,116         64,098         55,708         53,699         36,000         10,000         1,800         16,000         298         0         0           2029         289,546         64,867         56,051         53,878         36,000         10,000         1,800         16,000         1,067         0         0           2030         293,017         65,644         56,304         54,024         36,000         8,000         1,800         16,000         3,844         0         0           2031         296,530         66,431         56,592         54,133         36,000         8,000         1,800         16,000         4,631         0         0           2032         300,085         67,228         56,881         54,242         36,000         8,000         1,800         16,000         5,428         0         0           2033         303,682         68,033         57,171         54,352         36,000         8,000         1,800         16,000         6,233         0         0															
2029     289,546     64,867     56,051     53,878     36,000     10,000     1,800     16,000     1,067     0     0       2030     293,017     65,644     56,304     54,024     36,000     8,000     1,800     16,000     3,844     0     0       2031     296,530     66,431     56,592     54,133     36,000     8,000     1,800     16,000     4,631     0     0       2032     300,085     67,228     56,881     54,242     36,000     8,000     1,800     16,000     5,428     0     0       2033     303,682     68,033     57,171     54,352     36,000     8,000     1,800     16,000     6,233     0     0															
2030         293,017         65,644         56,304         54,024         36,000         8,000         1,800         16,000         3,844         0         0           2031         296,530         66,431         56,592         54,133         36,000         8,000         1,800         16,000         4,631         0         0           2032         300,085         67,228         56,881         54,242         36,000         8,000         1,800         16,000         5,428         0         0           2033         303,682         68,033         57,171         54,352         36,000         8,000         1,800         16,000         6,233         0         0															
2031     296,530     66,431     56,592     54,133     36,000     8,000     1,800     16,000     4,631     0     0       2032     300,085     67,228     56,881     54,242     36,000     8,000     1,800     16,000     5,428     0     0       2033     303,682     68,033     57,171     54,352     36,000     8,000     1,800     16,000     6,233     0     0															
2032     300,085     67,228     56,881     54,242     36,000     8,000     1,800     16,000     5,428     0     0       2033     303,682     68,033     57,171     54,352     36,000     8,000     1,800     16,000     6,233     0     0												The state of the s			
2033 303,682 68,033 57,171 54,352 36,000 8,000 1,800 16,000 6,233 0 0															
2034 307,323 68,849 57,463 54,462 36,000 8,000 1,800 16,000 7,049 0 0	2034	307,323	68,849	57,463	54,462										

## 100-YEAR WATER DEMAND AND SUPPLY MODEL

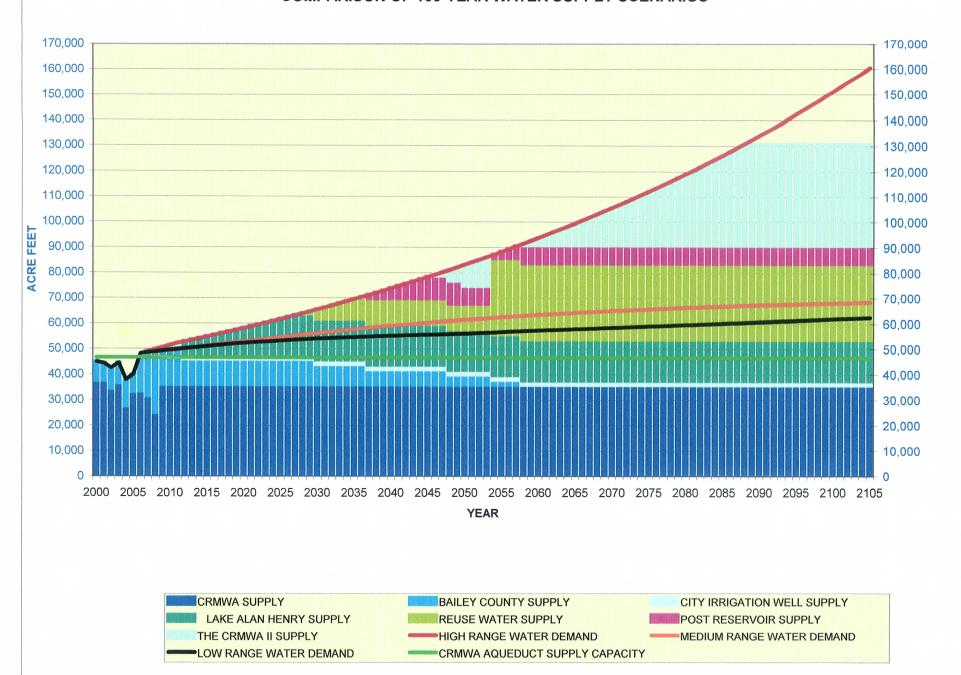
				HIGH RANG	SE WATER DEN	AND PROJEC	TIONS								
WATER DEM	AND PROJECTION	S BASED ON AVE	RAGE ANNUAL GAL	LONS PER CAPITA	PER DAY (GPCPD)	OF:					200				
ANNUAL POI	PULATION PROJEC	CTIONS -	HIGH RANGE - 1.63	3% FOR 5 YEARS, 1	.20% THEREAFTER	2			POPULATION OPTIO	ON:					
					NGE WATER DE		CTIONS								
WATER DEM	IAND PRO JECTION	IS BASED ON AVE	RAGE ANNUAL GAL				.0110110			1	200				
						OF.					200				
ANNUAL PUI	PULATION PROJEC	STIONS -	MEDIUM RANGE -	CITY PLANNING ES					POPULATION OPTIC	ON:					
	LOW RANGE WATER DEMAND PROJECTIONS  ATER DEMAND PROJECTIONS BASED ON AVERAGE ANNIAL GALLONS PER CAPITA PER DAY (GPCPD) OF:														
WATER DEM	ATER DEMAND PROJECTIONS BASED ON AVERAGE ANNUAL GALLONS PER CAPITA PER DAY (GPCPD) OF:														
ANNUAL PO	NUAL POPULATION PROJECTIONS - LOW RANGE - REGION O WATER PLAN/TWDB ESTIMATES POPULATION OPTION:  ERAGE ANNUAL PERCENT REDUCTION DUE WATER SAVING FIXTURES OF:														
AVERAGE A	NNUAL PERCENT	REDUCTION DUE \	WATER SAVING FIX	TURES OF:							0.00%				
2035	311,007	69,674	57,757	54,572	36,000	8,000	1,800	16,000	7,874	0	0				
2036	314,735	70,510	58,052	54,683	36,000	8,000	1,800	16,000	8,710	0	0				
2037	318,509	71,355	58,348	54,794	36,000	6,000	1,800	16,000	10,000	1,555	0				
2038	322,327	72,211	58,647	54,906	36,000	6,000	1,800	16,000	10,000	2,411	0				
2039	326,191	73,076	58,946	55,018	36,000	6,000	1,800	16,000	10,000	3,276	0				
2040	330,102	73,952	59,180	55,113	36,000	6,000	1,800	16,000	10,000	4,152	0				
2041	334,060	74,839	59,421	55,200	36,000	6,000	1,800	16,000	10,000	5,039	0				
2042	338,065	75,736	59,663	55,288	36,000	6,000	1,800	16,000	10,000	5,936	0				
2043	342,118	76,644	59,905	55,376	36,000	6,000	1,800	16,000	10,000	6,844	0				
2044	346,220	77,563	60,149	55,464	36,000	6,000	1,800	16,000	10,000	7,763	0				
2045	350,371 354,572	78,493 79,434	60,394	55,553	36,000	6,000	1,800	16,000	10,000	8,693	0				
2047	358,823	80,387	60,639 60,886	55,642	36,000	6,000	1,800	16,000	10,000	9,000	634				
2047	363,125	81,350	61,134	55,731 55,820	36,000	6,000 4,000	1,800	16,000	10,000	9,000	1,587				
2049	367,479	82,326	61,382	55,910	36,000 36,000	4,000	1,800 1,800	16,000 16,000	10,000 10,000	9,000	4,550				
2050	371,885	83,313	61,588	55,987	36,000	4,000	1,800	16,000	10,000	9,000	5,526 8,513				
2051	376,344	84,312	61,784	56,120	36,000	4,000	1,800	16,000	10,000	7,000	9,512				
2052	380,857	85,323	61,982	56,253	36,000	4,000	1,800	16,000	10,000	7,000	10,523				
2053	385,423	86,346	62,180	56,386	36,000	4,000	1,800	16,000	10,000	7,000	11,546				
2054	390,045	87,381	62,379	56,519	36,000	2,000	1,800	16,000	30,000	1,581	0				
2055	394,722	88,429	62,578	56,653	36,000	2,000	1,800	16,000	30,000	2,629	Ŏ				
2056	399,455	89,489	62,778	56,788	36,000	2,000	1,800	16,000	30,000	3,689	0				
2057	404,245	90,562	62,979	56,922	36,000	2,000	1,800	16,000	30,000	4,762	0				
2058	409,092	91,648	63,180	57,057	36,000		1,800	16,000	30,000	7,000	848				
2059	413,998	92,747	63,382	57,193	36,000		1,800	16,000	30,000	7,000	1,947				
2060	418,962	93,860	63,556	57,313	36,000		1,800	16,000	30,000	7,000	3,060				
2061	423,986	94,985	63,716	57,423	36,000		1,800	16,000	30,000	7,000	4,185				
2062	429,070	96,124	63,876	57,533	36,000		1,800	16,000	30,000	7,000	5,324				
2063	434,215	97,277	64,036	57,643	36,000		1,800	16,000	30,000	7,000	6,477				
2064	439,422	98,443	64,197	57,753	36,000		1,800	16,000	30,000	7,000	7,643				
2065	444,692	99,624	64,358	57,864	36,000		1,800	16,000	30,000	7,000	8,824				
2066	450,025	100,818	64,520	57,974	36,000		1,800	16,000	30,000	7,000	10,018				
2067	455,421	102,027	64,682	58,085	36,000		1,800	16,000	30,000	7,000	11,227				
2068	460,883	103,251	64,845	58,197	36,000		1,800	16,000	30,000	7,000	12,451				
2069	466,410	104,489	65,007	58,308	36,000		1,800	16,000	30,000	7,000	13,689				
2070	472,003	105,742	65,153	58,420	36,000		1,800	16,000	30,000	7,000	14,942				
2071	477,664	107,010	65,285	58,532	36,000		1,800	16,000	30,000	7,000	16,210				
2072	483,392	108,294	65,417	58,644	36,000		1,800	16,000	30,000	7,000	17,494				
2073	489,189	109,592	65,549	58,757	36,000		1,800	16,000	30,000	7,000	18,792				
2074	495,056	110,907	65,682	58,869	36,000		1,800	16,000	30,000	7,000	20,107				
2075	500,993	112,237	65,814	58,982	36,000		1,800	16,000	30,000	7,000	21,437				

## 100-YEAR WATER DEMAND AND SUPPLY MODEL

											SCENARIO 2007				
				HIGH RANG	GE WATER DEN	IAND PROJECTIO	NS								
WATER DEM	AND PROJECTION	S BASED ON AVE	RAGE ANNUAL GAI	LONS PER CAPITA	PER DAY (GPCPD	OF:					200				
ANNUAL POF	PULATION PROJEC	CTIONS -	HIGH RANGE - 1.6	3% FOR 5 YEARS, 1	.20% THEREAFTER	1			POPULATION OPTIC	ON:					
						MAND PROJECTI	ONS								
MATER DEM	AND DDO IFOTION	IC DACED ON AVE	DAGE ANNUAL CAL				0110				200				
	ATER DEMAND PROJECTIONS BASED ON AVERAGE ANNUAL GALLONS PER CAPITA PER DAY (GPCPD) OF:  NUAL POPULATION PROJECTIONS - MEDIUM RANGE - CITY PLANNING ESTIMATES POPULATION OPTION:														
ANNUAL POP	PULATION PROJEC	CTIONS -	MEDIUM RANGE -						POPULATION OPTIC	DN:					
	LOW RANGE WATER DEMAND PROJECTIONS  ATER DEMAND PROJECTIONS BASED ON AVERAGE ANNUAL GALLONS PER CAPITA PER DAY (GPCPD) OF:														
WATER DEM	AND PROJECTION	NS BASED ON AVE	RAGE ANNUAL GAI	LONS PER CAPITA	PER DAY (GPCPD	) OF:					20				
ANNUAL POF	PULATION PROJEC	CTIONS -	LOW RANGE - REG	SION O WATER PLA	AN/TWDB ESTIMAT	ES			POPULATION OPTIC	ON:					
EVERAGE ANNUAL PERCENT REDUCTION DUE WATER SAVING FIXTURES OF:															
2076	507,001	113,583	65,948	59.095	36,000		1.800	16.000	30,000	7,000	0.00% 22,783				
2077	513,081	114,945	66,081	59,209	36,000		1,800	16,000	30,000	7,000	24,145				
2078	519,235	116,324	66,215	59,322	36,000		1,800	16,000	30,000	7,000	25,524				
2079	525,462	117,719	66,349	59,436	36,000		1,800	16,000	30,000	7,000	26,919				
2080	531,764	119,130	66,471	59,550	36,000		1,800	16,000	30,000	7,000	28,330				
2081	538,142	120,559	66,573	59,665	36,000		1,800	16,000	30,000	7,000	29,759				
2082	544,596	122,005	66,675	59,779	36,000		1,800	16,000	30,000	7,000	31,205				
2083	551,127	123,468	66,778	59,894	36,000		1,800	16,000	30,000	7,000	32,668				
2084	557,737	124,949	66,880	60,009	36,000		1,800	16,000	30,000	7,000	34,149				
2085	564,426	126,448	66,982	60,124	36,000		1,800	16,000	30,000	7,000	35,648				
2086	571,196	127,964	67,085	60,240	36,000		1,800	16,000	30,000	7,000	37,164				
2087	578,047	129,499	67,188	60,356	36,000		1,800	16,000	30,000	7,000	38,699				
2088	584,980	131,052	67,291	60,472	36,000		1,800	16,000	30,000	7,000	40,000				
2089	591,996	132,624	67,394	60,588	36,000		1,800	16,000	30,000	7,000	40,000				
2090	599,096	134,215	67,491	60,705	36,000		1,800	16,000	30,000	7,000	40,000				
2091	606,282	135,825	67,562	60,821	36,000		1,800	16,000	30,000	7,000	40,000				
2092	613,553	137,454	67,632	60,938	36,000		1,800	16,000	30,000	7,000	40,000				
2093	620,912	139,102	67,703	61,056	36,000		1,800	16,000	30,000	7,000	40,000				
2094	628,360	140,771	67,774	61,173	36,000		1,800	16,000	30,000	7,000	40,000				
2095	635,897	142,459	67,845	61,291	36,000		1,800	16,000	30,000	7,000	40,000				
2096	643,524	144,168	67,915	61,409	36,000		1,800	16,000	30,000	7,000	40,000				
2097	651,242	145,897	67,986	61,527	36,000		1,800	16,000	30,000	7,000	40,000				
2098	659,054	147,647	68,057	61,646	36,000		1,800	16,000	30,000	7,000	40,000				
2099	666,959	149,418	68,129	61,765	36,000		1,800	16,000	30,000	7,000	40,000				
2100	674,959	151,210	68,197	61,884	36,000		1,800	16,000	30,000	7,000	40,000				
2101	683,055	153,024	68,268	62,003	36,000		1,800	16,000	30,000	7,000	40,000				
2102	691,248	154,859	68,340	62,122	36,000		1,800	16,000	30,000	7,000	40,000				
2103	699,539	156,717	68,411	62,242	36,000		1,800	16,000	30,000	7,000	40,000				
2104	707,930	158,597	68,483	62,362	36,000		1,800	16,000	30,000	7,000	40,000				
2105	716,421	160,499	68,554	62,482	36,000		1,800	16,000	30,000	7,000	40,000				

YEARS 2000-2005 CONTAIN ACTUAL CONSUMPTION FIGURES

#### **COMPARISON OF 100-YEAR WATER SUPPLY SCENARIOS**



# 100-YEAR AVERAGE DAY AND MAXIMUM DAY MODEL

MAXIMUM	DAY FACTOR		SCENARIO 2007												
			HIGH R	ANGE WATE	R DEMAND	PROJECT	IONS								
WATER DEM	AND PROJECTION	S BASED ON AV	ERAGE ANNU	JAL GALLONS F	PER CAPITA PE	R DAY (GPC	PD) OF:			200					
ANNUAL POP	PULATION PROJEC	TIONS -	HIGH RANGE	- 1.63% FOR 5	YEARS, 1.20%	THEREAFTE	R	POPULATI	ON OPTION:	3					
			MEDIUM	RANGE WA	TER DEMAN	ND PROJEC	CTIONS								
WATER DEM	MAND PROJECTION	S BASED ON AV								200					
	PULATION PROJEC	2													
MINIONETO	I OLIVITATION OF														
WATER REA	AAND DDO IEGEION	200													
	ATER DEMAND PROJECTIONS BASED ON AVERAGE ANNUAL GALLONS PER CAPITA PER DAY (GPCPD) OF: INUAL POPULATION PROJECTIONS - LOW RANGE - REGION O WATER PLAN/TWDB ESTIMATES POPULATION OPTION:														
		1													
	NNUAL PERCENT F	0.00%	****												
	POPULATION			MEDIUM		LOW F		CURRENT	CURRENT	CURRENT	PROPOSED				
	LUBBOCK		MAXIMUM					MAXIMUM	MAXIMUM	MAXIMUM	MAXIMUM				
	PLUS	AVERAGE	DAY	AVERAGE		AVERAGE		CRMWA	BAILEY COUNTY	TERMINAL STORAGE	OTHER				
YEAR	WHOLESALE CUSTOMERS	DAY (MGD)	(MGD)	DAY (MGD)	(MGD)	DAY (MGD)	(MGD)	SUPPLY	SUPPLY	SUPPLY (MCD FOR 15 DAYS)	SUPPLIES				
1995	196,329	40.61	79.54	40.61	79.54	40.61	79.54	(MGD) 41.69	(MGD) 40.00	(MGD FOR 15 DAYS) 25.00	(MGD)				
1996	197,745	39.44	66.71	39.44	66.71	39.44	66.71	41.69	40.00	25.00					
1997	199,163	36.07	63.37	36.07	63.37	36.07	63.37	41.69	40.00	25.00					
1998	200,504	44.01	84.17	44.01	84.17	44.01	84.17	41.69	40.00	25.00					
1999	201,965	36.99	68.93	36.99	68.93	36.99	68.93	41.69	40.00	25.00	***************************************				
2000	203,454	39.51	67.82	39.51	67.82	39.51	67.82	41.69	40.00	25.00					
2001	205,402	38.35	73.09	38.35	73.09	38.35	73.09	41.69	40.00	25.00					
2002	207,369	36.57	63.91	36.57	63.91	36.57	63.91	41.69	40.00	25.00					
2003	209,357	38.84	73.61	38.84	73.61	38.84	73.61	41.69	40.00	25.00					
2004	211,348	33.57	59.94	33.57	59.94	33.57	59.94	41.69	40.00	25.00					
2005	213,390	35.58	62.54	35.58	62.54	35.58	62.54	41.69	40.00	25.00					
2006	215,533	43.11	78.45	43.11	78.45	43.11	78.45	41.69	40.00	25.00					
2007	219,041	43.81	79.73	43.37	78.93	43.41	79.01	41.69	40.00	25.00					
2008	222,607	44.52	81.03	43.64	79.42	43.72	79.58	41.69	40.00	25.00	***************************************				
2009	226,230	45.25	82.35	43.91	79.91	44.04	80.14	41.69	40.00	25.00					
2010	229,913 233,656	45.98 46.73	83.69 85.05	44.16 44.48	80.38 80.96	44.34	80.69	41.69 41.69	40.00	25.00					
2012	236,456	47.29	86.07	44.40	81.54	44.57 44.80	81.12 81.54	41.69	40.00 40.00	25.00 25.00	25.00				
2013	239,290	47.86	87.10	45.13	82.13	45.04	81.97	41.69	40.00	25.00	25.00				
2014	242,158	48.43	88.15	45.45	82.72	45.28	82.41	41.69	40.00	25.00	25.00				
2015	245,060	49.01	89.20	45.78	83.32	45.52	82.84	41.69	40.00	25.00	25.00				
2016	247,997	49.60	90.27	46.11	83.92	45.76	83.28	41.69	40.00	25.00	25.00				
2017	250,970	50.19	91.35	46.44	84.53	46.00	83.72	41.69	40.00	25.00	25.00				
2018	253,978	50.80	92.45	46.78	85.14	46.25	84.17	41.69	40.00	25.00	25.00				
2019	257,022	51.40	93.56	47.12	85.75	46.49	84.61	41.69	40.00	25.00	25.00				
2020	260,102	52.02	94.68	47.35	86.18	46.68	84.96	41.69	40.00	25.00	25.00				
2021	263,220	52.64	95.81	47.64	86.71	46.84	85.24	41.69	40.00	25.00	25.00				
2022	266,375	53.28	96.96	47.93	87.24	46.99	85.52	41.69	40.00	25.00	25.00				
2023	269,568	53.91	98.12	48.23	87.78	47.15	85.81	41.69	40.00	25.00	25.00				
2024	272,799	54.56	99.30	48.53	88.32	47.30	86.09	41.69	40.00	25.00	25.00				
2025	276,069	55.21	100.49	48.83	88.86	47.46	86.38	41.69	40.00	25.00	25.00				
2026	279,378	55.88	101.69	49.13	89.41	47.62	86.67	41.69	40.00	25.00	25.00				
2027	282,727	56.55	102.91	49.43	89.96	47.78	86.96	41.69	40.00	25.00	25.00				
2028	286,116	57.22	104.15	49.73	90.51	47.94	87.25	41.69	40.00	25.00	42.00				

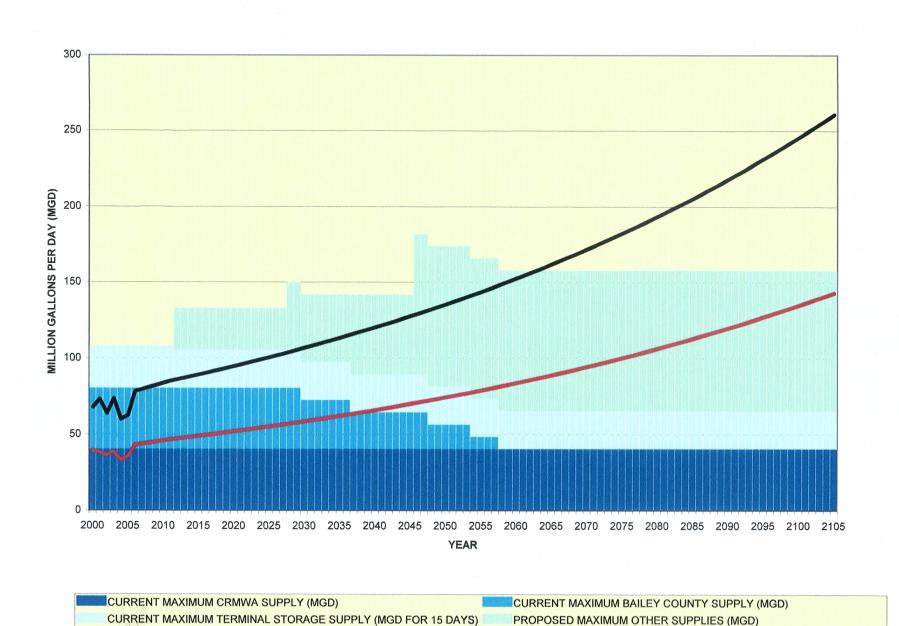
# 100-YEAR AVERAGE DAY AND MAXIMUM DAY MODEL

	SCENARIO 2007								1.82	DAY FACTOR	MAXIMUM
				IONS	PROJECT	R DEMAND	ANGE WATE	HIGH RA			
	200			PD) OF:	R DAY (GPC	ER CAPITA PE	AL GALLONS P	ERAGE ANNU	S BASED ON AV	AND PROJECTIONS	NATER DEM
	3	ON OPTION:	POPULATIO	Real Parties No. of Concessions			- 1.63% FOR 5			ULATION PROJECT	
	_	AT OF FIGHT	7 07 02 1110				RANGE WAT		Herte	0211101111110020	
	200								0.0000.000.000	ND DDG IEGTIGN	W TED DEM
	200			PD) OF:	*					AND PROJECTIONS	
	2	ON OPTION:	POPULATIO		TES	INING ESTIMA	GE - CITY PLAN	MEDIUM RAN	TIONS -	ULATION PROJEC	ANNUAL POF
	<b>在公司的发表的对象的影响</b>			IONS	<b>PROJECT</b>	R DEMAND	ANGE WATE	LOW RA			
	200			PD) OF:	R DAY (GPC	ER CAPITA PE	AL GALLONS P	ERAGE ANNU	S BASED ON AV	AND PROJECTIONS	VATER DEM
	1	ON OPTION:	POPULATION	ES	VDB ESTIMAT	ATER PLAN/TV	- REGION O WA	LOW RANGE	TIONS -	ULATION PROJECT	NNUAL POP
	0.00%								REDUCTION DUE	INUAL PERCENT R	VERAGE AN
42.00	25.00	40.00	41.69	87.54	48.10	91.07	50.04	105.39	57.91	289,546	2029
42.00	25.00	32.00	41.69	87.78	48.23	91.48	50.27	106.66	58.60	293,017	2030
42.00	25.00	32.00	41.69	87.95	48.33	91.95	50.52	107.94	59.31	296,530	2031
42.00	25.00	32.00	41.69	88.13	48.42	92.42	50.78	109.23	60.02	300,085	2032
42.00	25.00	32.00	41.69	88.31	48.52	92.89	51.04	110.54	60.74	303,682	2033
42.00	25.00	32.00	41.69	88.49	48.62	93.37	51.30	111.87	61.46	307,323	2034
42.00	25.00	32.00	41.69	88.67	48.72	93.84	51.56	113.21	62.20	311,007	2035
42.00	25.00	32.00	41.69	88.85	48.82	94.32	51.83	114.56	62.95	314,735	2036
50.00	25.00	24.00	41.69	89.03	48.92	94.80	52.09	115.94	63.70	318,509	2037
50.00	25.00	24.00	41.69	89.21	49.02	95.29	52.36	117.33	64.47	322,327	2038
50.00	25.00	24.00	41.69	89.39	49.12	95.78	52.62	118.73	65.24	326,191	2039
50.00	25.00	24.00	41.69	89.55	49.20	96.16	52.83	120.16	66.02	330,102	2040
50.00	25.00	24.00	41.69	89.69	49.28	96.55	53.05	121.60	66.81	334,060	2041
50.00	25.00	24.00	41.69	89.83	49.36	96.94	53.26	123.06	67.61	338,065	2042
50.00	25.00	24.00	41.69	89.97	49.44	97.33	53.48	124.53	68.42	342,118	2043
50.00	25.00	24.00	41.69	90.12	49.52	97.73	53.70	126.02	69.24	346,220	2044
50.00	25.00	24.00	41.69	90.26	49.59	98.13	53.92	127.53	70.07	350,371	2045
90.00	25.00	24.00	41.69	90.41	49.67	98.53	54.14	129.06	70.91	354,572	2046
90.00	25.00	24.00	41.69	90.55	49.75	98.93	54.36	130.61	71.76	358,823	2047
90.00	25.00	16.00	41.69	90.70	49.83	99.33	54.58	132.18	72.63	363,125	2048
90.00	25.00	16.00	41.69	90.84	49.91	99.73	54.80	133.76	73.50	367,479	2049
90.00	25.00	16.00	41.69	90.97	49.98	100.07	54.98	135.37	74.38	371,885	2050
90.00	25.00	16.00	41.69	91.18	50.10	100.39	55.16	136.99	75.27	376,344	2051
90.00	25.00	16.00	41.69	91.40	50.22	100.71	55.33	138.63	76.17	380,857	2052
90.00	25.00	16.00	41.69	91.62	50.34	101.03	55.51	140.29	77.08	385,423	2053
90.00	25.00	8.00	41.69	91.83	50.46	101.35	55.69	141.98	78.01	390,045	2054
90.00	25.00	8.00	41.69	92.05	50.58	101.68	55.87	143.68	78.94	394,722	2055
90.00	25.00	8.00	41.69	92.27	50.70	102.00	56.04	145.40	79.89	399,455	2056
90.00	25.00	8.00	41.69	92.49	50.82	102.33	56.22	147.15	80.85	404,245	2057
90.00	25.00		41.69	92.71	50.94	102.65	56.40	148.91	81.82	409,092	2058
90.00	25.00		41.69	92.93	51.06	102.98	56.58	150.70	82.80	413,998	2059
90.00	25.00		41.69	93.12	51.17	103.27	56.74	152.50	83.79	418,962	2060
90.00	25.00		41.69	93.30	51.26	103.53	56.88	154.33	84.80	423,986	2061
90.00	25.00		41.69	93.48	51.36	103.79	57.02	156.18	85.81	429,070	2062
90.00	25.00		41.69	93.66	51.46	104.05	57.17	158.05	86.84	434,215	2063
90.00	25.00		41.69	93.84	51.56	104.31	57.31	159.95	87.88	439,422	2064
90.00	25.00		41.69	94.02	51.66	104.57	57.46	161.87	88.94	444,692	2065
90.00	25.00		41.69	94.20	51.76	104.83	57.60	163.81	90.00	450,025	2066
90.00	25.00		41.69	94.38	51.86	105.09	57.74	165.77	91.08	455,421	2067

## 100-YEAR AVERAGE DAY AND MAXIMUM DAY MODEL

MAXIMUM	DAY FACTOR	SCENARIO 2007									
			HIGH R	ANGE WAT	ER DEMAND	PROJECT	TIONS				
WATER DEM	AND PROJECTION	IS BASED ON A	VERAGE ANNU	JAL GALLONS I	PER CAPITA PE	R DAY (GPC	PD) OF:			200	
CONTRACTOR OF THE PARTY OF THE	PULATION PROJEC			- 1.63% FOR 5				POPLII AT	ON OPTION:	3	
	OE WOULD	THORIC		RANGE WA				TOTOBAT	ion or non.		
MATER REM	IAND DDO IDOTION	10 DAOED ON A								200	
BOOK OF THE REAL PROPERTY AND ADDRESS OF THE PERSON OF THE	IAND PROJECTION						PD) OF:			200	
ANNUAL POP	PULATION PROJEC	CTIONS -		IGE - CITY PLA				POPULATI	ON OPTION:	2	
			LOW R	ANGE WATE	ER DEMAND	PROJECT	TIONS				
WATER DEM	AND PROJECTION	IS BASED ON A	VERAGE ANNU	JAL GALLONS	PER CAPITA PE	R DAY (GPC	PD) OF:			200	
ANNUAL POP	PULATION PROJEC	CTIONS -	LOW RANGE	- REGION O W	ATER PLAN/TV	VDB ESTIMAT	res	POPULAT	ION OPTION:	1	
AVERAGE AN	NNUAL PERCENT F	REDUCTION DU								0.00%	
2068	460,883	92.18	167.76	57.89	105.36	51.95	94.56	41.69	T	25.00	90.00
2069	466,410	93.28	169.77	58.03	105.62	52.05	94.74	41.69		25.00	90.00
2070	472,003	94.40	171.81	58.16	105.86	52.15	94.92	41.69		25.00	90.00
2071	477,664	95.53	173.87	58.28	106.07	52.25	95.10	41.69		25.00	90.00
2072	483,392	96.68	175.95	58.40	106.29	52.35	95.28	41.69		25.00	90.00
2073	489,189	97.84	178.06	58.52	106.50	52.45	95.47	41.69		25.00	90.00
2074	495,056	99.01	180.20	58.64	106.72	52.56	95.65	41.69		25.00	90.00
2075	500,993	100.20	182.36	58.76	106.93	52.66	95.83	41.69		25.00	90.00
2076	507,001	101.40	184.55	58.87	107.15	52.76	96.02	41.69		25.00	90.00
2077	513,081	102.62	186.76	58.99	107.37	52.86	96.20	41.69		25.00	90.00
2078	519,235	103.85	189.00	59.11	107.58	52.96	96.39	41.69		25.00	90.00
2079	525,462	105.09	191.27	59.23	107.80	53.06	96.57	41.69		25.00	90.00
2080	531,764	106.35	193.56	59.34	108.00	53.16	96.76	41.69		25.00	90.00
2081	538,142	107.63	195.88	59.43	108.17	53.27	96.94	41.69		25.00	90.00
2082	544,596	108.92	198.23	59.52	108.33	53.37	97.13	41.69		25.00	90.00
2083	551,127	110.23	200.61	59.62	108.50	53.47	97.32	41.69		25.00	90.00
2084	557,737	111.55	203.02	59.71	108.67	53.57	97.50	41.69		25.00	90.00
2085	564,426	112.89	205.45	59.80	108.83	53.68	97.69	41.69		25.00	90.00
2086	571,196	114.24	207.92	59.89	109.00	53.78	97.88	41.69		25.00	90.00
2087	578,047	115.61	210.41	59.98	109.17	53.88	98.07	41.69		25.00	90.00
2088	584,980	117.00	212.93	60.07	109.33	53.99	98.25	41.69		25.00	90.00
2089	591,996	118.40	215.49	60.17	109.50	54.09	98.44	41.69		25.00	90.00
2090	599,096	119.82	218.07	60.25	109.66	54.19	98.63	41.69		25.00	90.00
2091	606,282	121.26	220.69	60.32	109.77	54.30	98.82	41.69		25.00	90.00
2092	613,553	122.71	223.33	60.38	109.89	54.40	99.01	41.69		25.00	90.00
2093	620,912	124.18	226.01	60.44	110.00	54.51	99.20	41.69		25.00	90.00
2094	628,360	125.67	228.72	60.50	110.12	54.61	99.39	41.69		25.00	90.00
2095	635,897	127.18	231.47	60.57	110.23	54.72	99.59	41.69		25.00	90.00
2096	643,524	128.70	234.24	60.63	110.35	54.82	99.78	41.69		25.00	90.00
2097	651,242	130.25	237.05	60.69	110.46	54.93	99.97	41.69		25.00	90.00
2098	659,054	131.81	239.90	60.76	110.58	55.03	100.16	41.69		25.00	90.00
2099	666,959	133.39	242.77	60.82	110.69	55.14	100.35	41.69		25.00	90.00
2100	674,959	134.99	245.68	60.88	110.81	55.25	100.55	41.69		25.00	90.00
2101	683,055	136.61	248.63	60.95	110.92	55.35	100.74	41.69		25.00	90.00
2102	691,248	138.25	251.61	61.01	111.04	55.46	100.94	41.69		25.00	90.00
2103	699,539	139.91	254.63	61.07	111.15	55.57	101.13	41.69		25.00	90.00
2104 2105	707,930	141.59	257.69	61.14	111.27	55.67	101.33	41.69		25.00	90.00
2105	716,421	143.28	260.78	61.20	111.39	55.78	101.52	41.69		25.00	90.00

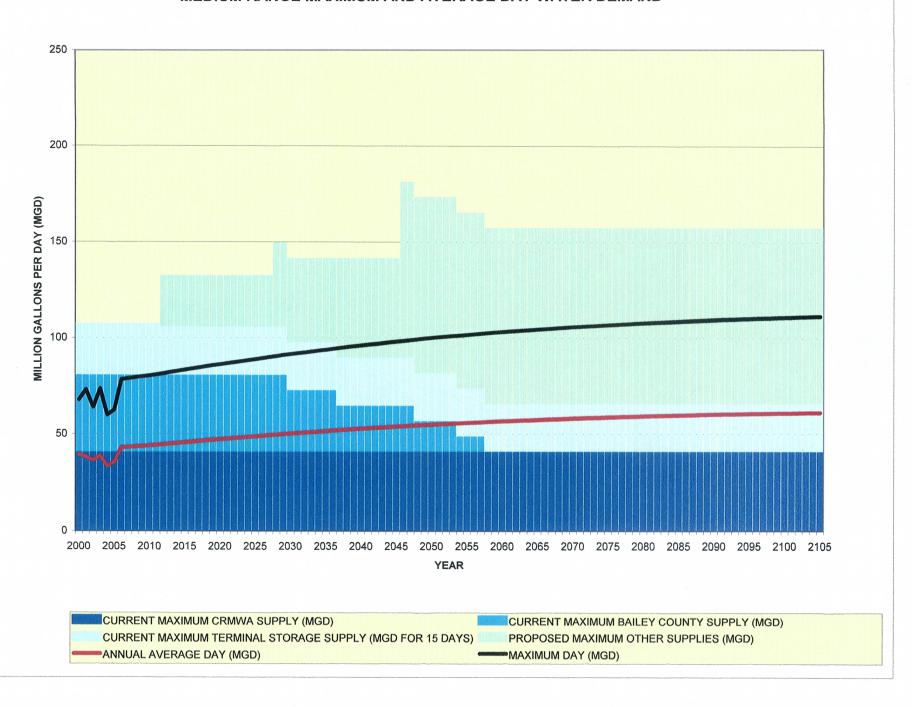
#### HIGH RANGE MAXIMUM AND AVERAGE DAY WATER DEMAND



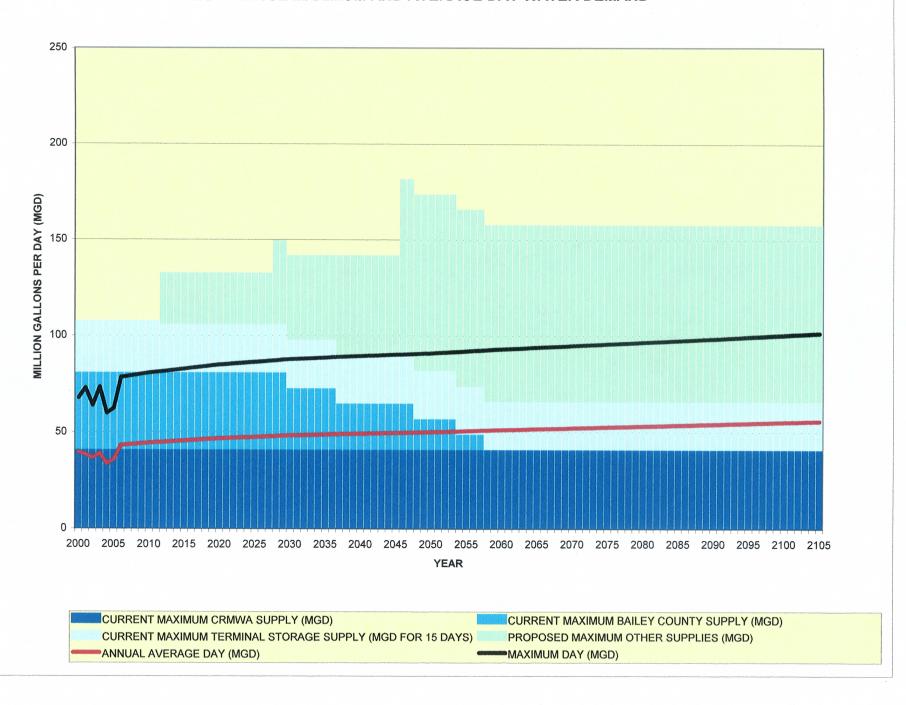
MAXIMUM DAY (MGD)

ANNUAL AVERAGE DAY

#### MEDIUM RANGE MAXIMUM AND AVERAGE DAY WATER DEMAND



#### LOW RANGE MAXIMUM AND AVERAGE DAY WATER DEMAND



#### 100-YEAR HIGH RANGE WATER DEMAND AND SUPPLY MODEL

Column   C	MAXIMUM DAY FACTOR 1.82										SCENARIO 2007	1 1	MANUAL	]	LEFT GRAPH PF	RIMARY Y-AXIS S	CALE FACTOR	T	161301		
ACCUPANT										POPULATI	ON OPTION:	3		0		RIGHT GRAPH	PRIMARY Y-AXIS	SCALE FACTOR		262	
Property   Company   Com						PITA PER DAY (GP	CPD) OF:							0.00%	1						
Part   Ward   Ward   Colore   Ward   Colore   Ward   Colore   Co		POPULATION	HIGH		1								NGE		CURRENT	PROPOSED	PROPOSED	PROPOSED	PROPOSED	PROPOSED	CURRENT MAXIMUM
MATERIAL STATE   SAMPLE   SA				CRMWA																	
The control of the						SUPPLY	SUPPLY														
Section   Color   Co						(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(MGD)		(41.69 MGD)	(40 MGD)	(1.6 MGD)	(25 MGD)	(17 MGD)	(8 MGD)		
Section   Sect						<del> </del>															
Section   Sect	2002	207,369	42,561	34,380	8,181						46,693	36.57	63.91		22.22						
1.00																					
Section   Column						CATTER SECTION	MODEL SERVICE														
1985   1986											46,693	43.11	78.45	41.69	36.76	0.00	0.00				
10   13   13   13   13   13   13   13																					
	2009	226,230	50,682	36,000	13,882	800	0	0			46,693										
10																	0.00	0.00	0.40	0.00	0.00
10	2012																				
10   25   25   25   25   25   25   25   2											46,693	47.86	87.10	41.69	40.00	1.60					
10																					
100   100	2016	247,997	55,559	36,000	10,000																
250 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26											46,693	50.19	91.35	41.69	40.00	1.60	8.06	0.00	0.00	0.00	0.00
200   100									-												
100	2020	260,102	58,270	36,000	10,000	1,800	10,470	0	0	0	46,693	52.02	94.68								
200   200															40.00	1.60	12.52	0.00	0.00	0.00	0.00
202.00   2	2023	269,568																			
1000   1700   1700   1500											46,693	54.56	99.30	41.69	40.00	1.60	16.01	0.00	0.00		
2021   2021																					
	2027	282,727	63,339	36,000	10,000	1,800		0													
1800   1800												57.22	104.15	41.69	40.00	1.60	20.86	0.00	0.00	0.00	0.00
2015   2005									0												
1.000000000000000000000000000000000000	2031	296,530	66,431	36,000	8,000	1,800	16,000	4,631	0		46,693										
2024   302,23   68,469   30,000   5,000   1,600   1,																	25.00				0.00
2015   311,077   66,674   30,000   5,000   1,000   10,000   7,874   0   0   46,985   62,20   113,21   41,99   32,20   110   25,00   125,00   125,00   0.000	2034																				
2013 325,237 72,211 350,000 6,000 1,600 16,000 10,000 2,155 0 46,000 16,000 10,000 2,121 0 46,000 16,000 16,000 10,000 2,121 0 46,000 16,000 16,000 10,000 2,121 0 46,000 16,000 10,000 2,121 0 46,000 16,000 10,000							16,000				46,693	62.20	113.21	41.69	32.00	1.60	25.00	12.92	0.00		
2029 322, 277 2741 30,000 6,000 1,000 10,000 2,411 0 46,993 64,47 11733 41,59 24,00 160 25,00 17,00 8,00 1,44 0,00 1,00 1,00 1,00 1,00 1,00 1																					
2009   325,019   73,076   36,000   6,000   1,000   10,0	2038	322,327	72,211	36,000																	
2041 334,000 174,539 36,000 6,000 1,600 16,000 10,000 5,039 0 46,000 16,000 11,000 5,039 0 0 46,000 16,000 10,000 5,039 0 0 46,000 16,000 10,0													118.73	41.69	24.00	1.60	25.00	17.00	8.00	1.44	0.00
2042 338,055 75,738 38,000 6,000 1,800 16,000 10,000 5,938 0 46,963 6781 123,06 41,96 24,00 16,00 25,00 17,00 8,00 75,77 0,00 0 1,000 10,000 1													120.16								
2044 346,220 77,883 38,000 6,000 1,800 16,000 10,000 7,763 0 46,983 0 146,983 70,00 123,00 15,00 17,00 8,00 17,00 10,00							16,000	10,000	5,936	0	46,693	67.61	123.06		24.00						
2046 350,371 78,489 38,000 6,000 1,800 16,000 10,000 8,083 0 46,683 70,07 127,55 41,69 24,00 1,60 25,00 17,00 8,00 10,17 0,00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																					
2040 354,572 19,434 36,000 6,000 1,800 16,000 10,000 9,000 634 46,693 77,61 120,06 14,69 24,00 160 25,00 17,00 8,00 11,77 0,00 0 1201 353,23 83,000 4,000 1,800 16,000 10,000 9,000 4,550 46,693 77,6 130,61 41,69 16,00 16,00 25,00 17,00 8,00 13,32 0,00 0 1,000	2045	350,371	78,493	36,000	6,000																
2048 383,125 81,350 38,000 4,000 1,800 16,000 10,000 89,000 4,550 46,683 72,83 132,18 41,69 16,00 160 25,00 17,00 8,00 22,89 0,00 0,00 0,00 0,00 0,00 0,00 0,00 0															24.00	1.60	25.00	17.00	8.00	11.77	0.00
2049 367.479 82,326 38,000 4,000 1,800 16,000 10,000 7,000 5,526 46,863 75,50 133.76 41,89 16,00 160 25,00 17,00 8,00 24,47 0,00 2051 376,344 84,312 38,000 4,000 1,800 16,000 10,000 7,000 8,513 46,863 75,37 136,89 16,00 160 150 25,00 17,00 8,00 27,70 0,00 2051 376,344 84,312 38,000 4,000 1,800 16,000 10,000 7,000 10,523 46,863 75,27 136,89 41,89 16,00 160 25,00 17,00 8,00 27,70 0,00 2053 385,423 86,346 36,000 4,000 1,800 16,000 10,000 7,000 10,523 46,863 76,17 138,83 41,89 16,00 160 25,00 17,00 8,00 27,70 0,00 12053 385,423 86,346 36,000 4,000 1,800 16,000 10,000 7,000 11,546 46,893 76,17 138,83 41,89 16,00 1,800 16,00 16,000 10,000 7,000 11,546 46,893 76,17 138,83 41,89 16,00 1,800 15,00 17,00 8,00 28,34 0,00 1,800 16,000 10,000 7,000 11,546 46,893 76,17 138,83 41,89 16,00 1,800 15,00 17,00 8,00 28,34 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,0																					
2051 378,344 84,312 30,000 4,000 1,800 16,000 10,000 7,000 19,512 46,663 75,27 136,99 41,69 16,00 15,00 25,00 17,00 8,00 27,70 0,00 2053 389,627 85,23 30,000 4,000 1,800 16,000 10,000 7,000 115,66 46,663 76,16 138,63 41,69 16,00 16,00 16,000 10,000 7,000 115,66 46,663 77,08 140,29 41,69 16,00 15,00 25,00 17,00 8,00 25,34 0,00 2054 39,005 20,00 1,800 16,000 30,000 1,551 0 46,663 76,14 198 41,69 8,00 16,00 25,00 17,00 8,00 18,000 10,000 10,000 1,551 0 46,663 76,00 14,90 41,90 15,00 1			82,326	36,000	4,000	1,800	16,000	10,000	9,000	5,526	46,693	73.50	133.76								
2925 390,857 85,323 36,000 4,000 1,800 16,000 10,000 7,000 11,561 46,693 76,17 138.63 41.69 16,00 150 25.00 17.00 8.00 29.34 0.00   2954 390,045 87,381 36,000 4,000 1,800 16,000 30,000 1,581 0 46,693 76,01 141.99 41.69 8.00 1,50 25.00 17.00 8.00 40.00 0.00   2954 390,045 87,381 36,000 2,000 1,800 16,000 30,000 1,581 0 46,693 76,01 141.99 41.69 8.00 1,50 25.00 17.00 8.00 40.00 0.00   2958 394,722 88,429 36,000 2,000 1,800 16,000 30,000 30,000 1,581 0 46,693 76,01 141.99 41.69 8.00 1,50 25.00 17.00 8.00 40.00 0.00   2958 394,722 88,429 36,000 2,000 1,800 16,000 30,000 30,000 1,581 0 46,693 76,01 141.99 41.69 8.00 1,50 25.00 17.00 8.00 40.00 0.00   2958 394,722 88,429 36,000 2,000 1,800 16,000 30,000 30,000 1,581 0 46,693 76,98 143.40 41.69 8.00 1,50 25.00 17.00 8.00 40.00 0.00   2958 394,525 89,489 36,000 2,000 1,800 16,000 30,000 3,689 0 46,693 76,98 145.40 41.69 8.00 1,60 25.00 17.00 8.00 40.00 41.10   2957 404,245 90,592 36,000 2,000 1,800 16,000 30,000 7,000 14,72 0 46,693 80.55 147.15 41.69 8.00 1,60 25.00 17.00 8.00 40.00 41.11   2958 409,002 1,846 36,000 0 1,800 16,000 30,000 7,000 1,917 46,693 80.00 1,917 41.69 0.00 1,80 25.00 17.00 8.00 40.00 15.62   2959 413,998 02,747 36,000 0 1,800 16,000 30,000 7,000 19,47 46,693 80.00 19,000 1,80 25.00 17.00 8.00 40.00 15.62   2959 413,998 02,747 36,000 0 1,800 16,000 30,000 7,000 1,917 46,693 80.00 1,917 41.69 0.00 1,80 25.00 17.00 8.00 40.00 19,21   2961 423,986 49,85 36,000 0 0 1,800 16,000 30,000 7,000 1,900 1,900 1,900 1,900 1,80 25.00 17.00 8.00 40.00 19,21   2962 429,070 99,124 36,000 0 1,800 16,000 30,000 7,000 1,900																					0.00
2053 385,423 86,346 36,000 4,000 1,800 16,000 10,000 7,000 11,546 46,693 77.08 140,29 41,69 16,00 160 25.00 17,00 8.00 31,00 0.00 2050 2055 394,722 88,429 36,000 2,000 1,800 16,000 30,000 2,622 0 46,693 78,94 143,68 41,69 8.00 160 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 23,90 16,00 25.00 17,00 8.00 40,00 15.60 25.00 17,00 8.00 40,00 15.60 25.00 17,00 8.00 40,00 15.60 25.00 17,00 8.00 40,00 15.60 25.00 17,00 8.00 40,00 17,00 17,00 18,00 40,00 17,00 18,00 40,00 19,00 18,00	2052	380,857	85,323	36,000	4,000	1,800	16,000	10,000	7,000	10,523											
2055 394,722 88,429 38,000 2,000 1,800 16,000 30,000 2,029 0 46,693 78,94 143,68 41,69 8.00 1,60 25,00 17,00 8.00 40,00 2,39 2,058 39,455 89,489 36,000 2,000 1,800 16,000 30,000 4,762 0 46,693 79,89 145,40 41,69 8.00 1,60 25,00 17,00 8.00 40,00 5,86 2,00 40,00 1,800 16,000 30,000 4,762 0 46,693 81,80 147,15 41,69 8.00 1,60 25,00 17,00 8.00 40,00 5,86 2,00 1,800 16,000 30,000 7,000 848 46,693 81,82 148,89 1,40 1,40 1,40 1,40 1,40 1,40 1,40 1,40								10,000	7,000	11,546	46,693	77.08	140.29	41.69	16.00	1.60	25.00	17.00	8.00	31.00	0.00
2058 399.455 89.489 39.000 2.000 1.800 16.000 30.000 3.689 0 46.693 79.89 145.40 41.69 8.00 1.60 25.00 17.00 8.00 40.00 4.11 2057 404.245 90.592 38.000 2.000 1.800 16.000 30.000 7.000 846 46.933 81.82 148.91 41.69 8.00 1.60 25.00 17.00 8.00 40.00 5.86 2058 409.092 91.644 39.000 0 1.800 16.000 30.000 7.000 846 46.933 81.82 148.91 41.69 0.00 1.60 25.00 17.00 8.00 40.00 5.86 2059 418.92 23.890 38.90 0 1.800 16.000 30.000 7.000 1.947 46.693 82.80 150.70 41.69 0.00 1.80 25.00 17.00 8.00 40.00 17.41 2061 418.96 29.88 41.885 38.000 0 1.800 16.000 30.000 7.000 30.000 7.000 30.800 46.693 83.79 152.50 41.69 0.00 1.80 25.00 17.00 8.00 40.00 17.41 2061 418.98 22.97 47 38.000 0 1.800 16.000 30.000 7.000 30.000 7.000 30.800 46.693 83.79 152.50 41.69 0.00 1.80 25.00 17.00 8.00 40.00 19.21 2061 429.968 44.885 38.000 0 1.800 16.000 30.000 7.000 4.185 46.693 83.79 152.50 41.69 0.00 1.80 25.00 17.00 8.00 40.00 19.21 2061 429.068 49.000 1.800 18.0000 18.000 18.000 18.000 18.000 18.000 18.000 18.000 18.000 18.0000 1																					
2057 404,245 90,582 36,000 2,000 1,800 16,000 30,000 4,762 0 46,693 80.85 147,15 41,69 8.00 1,60 25,00 17,00 8.00 40,00 5,865 2059 413,998 92,747 36,000 0 1,800 16,000 30,000 7,000 848 46,693 81,82 144,91 41,69 0.00 1,60 25,00 17,00 8.00 40,00 17,41 46,993 92,41 36,000 0 1,800 16,000 30,000 7,000 1,947 46,693 82,80 150,70 41,69 0.00 1,60 25,00 17,00 8.00 40,00 17,41 46,993 81,82 148,91 41,69 0.00 1,800 1,800 1,800 16,000 30,000 7,000 41,85 46,693 82,80 150,70 41,69 0.00 1,800 25,00 17,00 8.00 40,00 17,41 46,993 84,80 154,33 41,69 0.00 1,800 25,00 17,00 8.00 40,00 19,21 40,40 1,40 1,40 1,40 1,40 1,40 1,40 1,	2056	399,455	89,489	36,000	2,000	1,800	16,000	30,000	3,689	0	46,693	79.89	145.40	41.69	8.00	1.60	25.00				
2059 413,998 92,747 36,000 0 1,800 16,000 30,000 7,000 1,947 46,693 82,80 150,70 41,69 0.00 1,80 25,00 17,00 8.00 40,00 17,41 2081 423,988 94,885 36,000 0 1,800 16,000 30,000 7,000 3,080 46,893 83,79 152,50 41,89 0.00 1,80 25,00 17,00 8.00 40,00 192,1 40,000 1,800 16,000 16,																					5.86
2060 418,962 93,860 36,000 0 1,800 16,000 30,000 7,000 3,080 46,893 83,79 152,50 41,89 0.00 1,80 25,00 17,00 8,00 40,00 19,21 2081 423,988 94,985 36,000 0 1,800 16,000 30,000 7,000 4,185 46,893 84,80 154,33 41,89 0.00 1,80 25,00 17,00 8,00 40,00 21,04 20,000 20	2059	413,998																			
2082         429,070         961,24         36,000         0         1,800         16,000         30,000         7,000         5,324         46,893         85,81         158,18         41,69         0.00         1,60         25,00         17,00         8,00         40,00         22,89           2083         434,215         97,277         36,000         0         1,600         15,000         30,000         7,000         6,477         46,693         87,88         159,95         41,69         0.00         1,60         25,00         17,00         8,00         40,00         24,76           2064         439,422         99,624         36,000         0         1,800         16,000         30,000         7,000         8,824         46,693         87,88         159,95         41,69         0.00         1,60         25,00         17,00         8,00         40,00         25,00         17,00         8,00         40,00         25,00         17,00         8,00         40,00         25,00         17,00         8,00         40,00         25,00         17,00         8,00         40,00         25,00         17,00         8,00         40,00         25,00         17,00         8,00         40,00         25,00						1,800	16,000	30,000	7,000	3,060	46,693	83.79	152.50	41.69	0.00	1.60	25.00	17.00	8.00	40.00	19.21
2083 434,215 97,277 36,000 0 1,800 16,000 30,000 7,000 6,477 46,893 86,84 158,05 41,89 0,00 1,80 25,00 17,00 8,00 40,00 24,76 2084 439,422 98,443 36,000 0 1,800 16,000 30,000 7,000 7,843 46,893 87,88 159,95 41,89 0,00 1,80 25,00 17,00 8,00 40,00 25,00 2084 44,892 99,624 38,000 0 1,800 16,000 30,000 7,000 18,00																					
2064 439,422 98,443 36,000 0 1,800 16,000 30,000 7,000 7,000 8,824 46,893 87,88 159,95 41,89 0.00 1,80 25,00 17,00 8,00 40,00 25,00 25,00 2064 450,025 100,818 36,000 0 1,800 16,000 30,000 7,000 10,018 46,693 90,00 18,81 41,89 0.00 1,80 25,00 17,00 8,00 40,00 25,00 25,00 2067 455,421 102,027 36,000 0 1,800 16,000 30,000 7,000 11,227 46,693 91,08 165,77 41,69 0.00 1,80 25,00 17,00 8,00 40,00 25,00 25,00 2067 455,421 102,027 36,000 0 1,800 16,000 30,000 7,000 11,227 46,693 91,08 165,77 41,69 0.00 1,80 25,00 17,00 8,00 40,00 25,00 25,00 2068 460,883 103,251 36,000 0 1,800 16,000 30,000 7,000 12,451 46,893 92,18 167,76 41,69 0.00 1,80 25,00 17,00 8,00 40,00 25,00 25,00 2070 472,003 105,742 36,000 0 1,800 16,000 30,000 7,000 13,869 46,893 92,28 169,77 41,69 0.00 1,80 25,00 17,00 8,00 40,00 25,00 25,00 2070 472,003 105,742 36,000 0 1,800 16,000 30,000 7,000 14,942 46,693 94,40 171,81 41,89 0.00 1,80 25,00 17,00 8,00 40,00 25,00 2071 472,003 105,742 36,000 0 1,800 16,000 30,000 7,000 14,942 46,693 95,53 173,87 41,69 0.00 1,80 25,00 17,00 8,00 40,00 25,00 2071 472,003 105,742 36,000 0 1,800 16,000 30,000 7,000 16,210 46,693 95,53 173,87 41,69 0.00 1,80 25,00 17,00 8,00 40,00 25,00 2071 473,003 105,742 36,000 0 1,800 16,000 30,000 7,000 16,210 46,693 95,53 173,87 41,69 0.00 1,80 25,00 17,00 8,00 40,00 25,00 2072 483,392 108,294 36,000 0 1,800 16,000 30,000 7,000 17,494 46,693 96,68 175,95 41,89 0.00 1,80 25,00 17,00 8,00 40,00 25,00 2073 489,189 109,592 36,000 0 1,800 16,000 30,000 7,000 18,792 46,893 97,84 178,06 41,89 0.00 1,80 25,00 17,00 8,00 40,00 25,00 2073 489,189 109,592 36,000 0 1,800 16,000 30,000 7,000 18,792 46,893 97,84 178,06 41,89 0.00 1,80 25,00 17,00 8,00 40,00 25,00 2075 500,993 112,237 36,000 0 1,800 16,000 30,000 7,000 18,792 46,893 97,84 178,06 41,89 0.00 1,80 25,00 17,00 8,00 40,00 25,00 2075 500,993 112,237 36,000 0 1,800 16,000 30,000 7,000 18,792 46,893 99,11 180,20 41,89 0.00 1,80 25,00 17,00 8,00 40,00 25,00 2075 2075 200,000 11,800 16,000 30,000 7,000 18,792 46,893 99,11 180,20 41,89 0.00 1,80	2063	434,215	97,277	36,000	0	1,800				6,477											
2086 450,025 100,818 36,000 0 1,800 16,000 30,000 7,000 10,018 46,693 90.00 163.81 41.69 0.00 1.60 25.00 17.00 8.00 40.00 25.00 25.00 455,421 102,027 38,000 0 1,800 16,000 30,000 7,000 11,227 46,693 91.08 165.77 41.69 0.00 1.60 25.00 17.00 8.00 40.00 25.00 25.00 20.00 1.00 1.00 10,000 1.00 1.00 1.00 1.0						1,800	16,000	30,000	7,000	7,643	46,693	87.88	159.95	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2007 455,421 102,027 36,000 0 1,800 16,000 30,000 7,000 11,227 46,693 91.08 165,77 41.69 0.00 1.60 25,00 17.00 8.00 40,00 25,00 25,00 2008 469,483 103,251 38,000 0 1,800 16,000 30,000 7,000 12,451 46,693 92.18 167,76 41.69 0.00 1.60 25,00 17.00 8.00 40,00 25,00 200 472,003 105,742 38,000 0 1,800 16,000 30,000 7,000 14,942 46,693 92.28 169,77 41.69 0.00 1.60 25,00 17.00 8.00 40,00 25,00 2070 472,003 105,742 38,000 0 1,800 16,000 30,000 7,000 14,942 46,693 94.00 171.81 41.69 0.00 1.60 25,00 17.00 8.00 40.00 25,00 2071 472,003 105,742 38,000 0 1,800 16,000 30,000 7,000 16,000 30,000																					
2068         469,883         103,251         38,000         0         1,800         16,000         30,000         7,000         12,451         46,693         92,18         167,76         41,69         0.00         160         25,00         17,00         8,00         40,00         25,00           2070         472,003         105,742         38,000         0         1,800         16,000         30,000         7,000         14,942         46,893         94.40         171,81         41,69         0.00         1,60         25,00         17,00         8,00         40,00         25,00           2071         477,664         107,01         36,000         0         1,800         16,000         30,000         7,000         16,210         46,693         94.40         171,81         41,69         0.00         1,60         25,00         17,00         8,00         40,00         25,00           2071         478,664         107,01         36,000         0         1,800         16,000         30,000         7,000         16,210         46,693         95,53         173,87         41,69         0.00         1,60         25,00         17,00         8,00         40,00         25,00           2072	2067	455,421	102,027	36,000		1,800															
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					The state of the s	1,800	16,000	30,000	7,000	12,451	46,693	92.18	167.76	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2071 477,664 107,010 36,000 0 1,800 16,000 30,000 7,000 16,210 46,693 95.53 173.87 41.69 0.00 1.60 25,00 17.00 8.00 40.00 25,00 2072 483,392 108,294 36,000 0 1,800 16,000 30,000 7,000 17,494 46,693 96.68 175.95 41.69 0.00 1.80 25,00 17.00 8.00 40.00 25,00 2073 489,189 109,592 36,000 0 1,800 16,000 30,000 7,000 18,792 46,893 97.84 178.06 41.69 0.00 1.80 25,00 17.00 8.00 40.00 25,00 2074 495,056 110,907 36,000 0 1,800 16,000 30,000 7,000 20,107 46,693 99.01 180.20 41.69 0.00 1.80 25,00 17.00 8.00 40.00 25,00 2075 500,993 112,237 38,000 0 1,800 16,000 30,000 7,000 21,437 46,693 100.20 182.36 41.69 0.00 1.60 25,00 17.00 8.00 40.00 25,00 2075 500,993 112,237 38,000 0 1,800 16,000 30,000 7,000 21,437 46,693 100.20 182.36 41.69 0.00 1.60 25,00 17.00 8.00 40.00 25,00 25,00 2075 500,993 112,237 38,000 0 1,800 16,000 30,000 7,000 21,437 46,693 100.20 182.36 41.69 0.00 1.60 25,00 17.00 8.00 40.00 25,00 25,00 2075 200,993 112,237 38,000 0 1,800 16,000 30,000 7,000 21,437 46,693 100.20 182.36 41.69 0.00 1.60 25,00 17.00 8.00 40.00 25,00 25,00 2075 200,993 112,237 38,000 0 1,800 16,000 30,000 7,000 21,437 46,693 100.20 182.36 41.69 0.00 1.60 25,00 17.00 8.00 40.00 25,00 25,00 2075 200,000 20,00																					
2072 483,392 108,294 36,000 0 1,800 16,000 30,000 7,000 17,494 46,693 96.68 175.95 41.69 0.00 1.60 25.00 17.00 8.00 40.00 25.00 25.00 2073 489,189 109,592 36,000 0 1,800 16,000 30,000 7,000 18,792 46,893 97.84 178.06 41.89 0.00 1.60 25.00 17.00 8.00 40.00 25.00 2074 495,056 110,907 36,000 0 1,800 16,000 30,000 7,000 20,107 46,693 99.01 180.20 41.89 0.00 1.60 25.00 17.00 8.00 40.00 25.00 2075 500,993 112,237 36,000 0 1,800 16,000 30,000 7,000 21,437 46,693 100.20 182.36 41.69 0.00 1.60 25.00 17.00 8.00 40.00 25.00	2071	477,664	107,010	36,000	0	1,800	16,000	30,000	7,000												
2074 495,056 110,907 36,000 0 1,800 16,000 30,000 7,000 20,107 46,693 99.01 180.20 41.69 0.00 1.60 25.00 17.00 8.00 40.00 25.00 2075 500,993 112,237 36,000 0 1,800 16,000 30,000 7,000 21,437 46,693 100.20 182.36 41.69 0.00 1.60 25.00 17.00 8.00 40.00 25.00 17.00 1.60 25.00 17.00					************				7,000	17,494	46,693	96.68	175.95	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2075 500,993 112,237 36,000 0 1,800 16,000 30,000 7,000 21,437 46,683 100.20 182.36 41,69 0.00 1.60 25,00 17,00 8.00 40,00 25,00																					
	2075	500,993	112,237	36,000		1,800	16,000	30,000	7,000	21,437	46,693	100.20	182.36	41.69	0.00	1.60	25.00	17.00	8.00		
	2076	507,001	113,583	36,000	1 0	1,800	16,000	30,000	7,000	22,783	46,693	101.40	184.55	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00

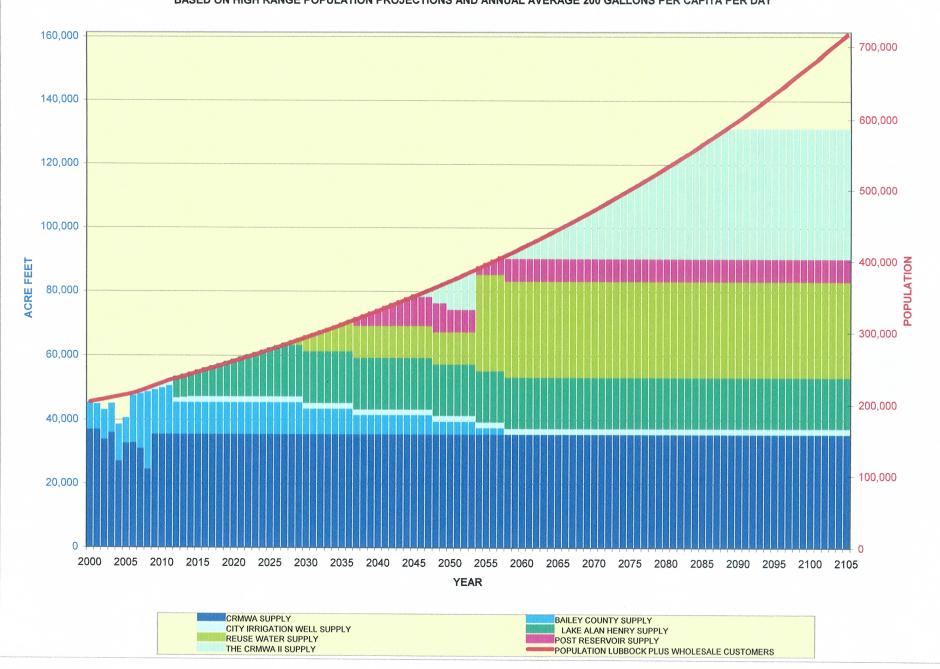
#### 100-YEAR HIGH RANGE WATER DEMAND AND SUPPLY MODEL

MAXIMUM DAY FACTO	R 1.82	1								SCENARIO 2007		MANUAL		LEFT GRAPH PF	RIMARY Y-AXIS S	CALE FACTOR		161301	
ANNUAL POPULATION PRO	JECTIONS -	HIGH RANGE - 1.6	33% FOR 5 YEARS	, 1.20% THEREAFT	rer			POPULATION	ON OPTION:	3		0		RIGHT GRAPH F	PRIMARY Y-AXIS	SCALE FACTOR		262	
WATER DEMAND PROJECT	IONS BASED ON AV	ERAGE ANNUAL G.	ALLONS PER CAP	ITA PER DAY (GPO	CPD) OF:					200		0		Long-transfer of the same of t					
AVERAGE ANNUAL PERCEN	NT REDUCTION DUE	WATER SAVING F	IXTURES OF:							0.00%		0.00%							
2077 513,081	114,945	36,000	0	1,800	16,000	30,000	7,000	24,145	46,693	102.62	186.76	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2078 519,235	116,324	36,000	0	1,800	16,000	30,000	7,000	25,524	46,693	103.85	189.00	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2079 525,462	117,719	36,000	0	1,800	16,000	30,000	7,000	26,919	46,693	105.09	191.27	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2080 531,764	119,130	36,000	0	1,800	16,000	30,000	7,000	28,330	46,693	106.35	193.56	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2081 538,142	120,559	36,000	0	1,800	16,000	30,000	7,000	29,759	46,693	107.63	195.88	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2082 544,596	122,005	36,000	0	1,800	16,000	30,000	7,000	31,205	46,693	108.92	198.23	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2083 551,127	123,468	36,000	0	1,800	16,000	30,000	7,000	32,668	46,693	110.23	200.61	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2084 557,737	124,949	36,000	0	1,800	16,000	30,000	7,000	34,149	46,693	111.55	203.02	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2085 564,426	126,448	36,000	0	1,800	16,000	30,000	7,000	35,648	46,693	112.89	205.45	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2086 571,196	127,964	36,000	0	1,800	16,000	30,000	7,000	37,164	46,693	114.24	207.92	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2087 578,047	129,499	36,000	0	1,800	16,000	30,000	7,000	38,699	46,693	115.61	210.41	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2088 584,980	131,052	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	117.00	212.93	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2089 591,996	132,624	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	118.40	215.49	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2090 599,096	134,215	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	119.82	218.07	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2091 606,282	135,825	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	121.26	220.69	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2092 613,553	137,454	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	122.71	223.33	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2093 620,912	139,102	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	124.18	226.01	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2094 628,360	140,771	36,000	0	1,800	16,000	30,000	7,000	40,000	46.693	125.67	228.72	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2095 635,897	142,459	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	127.18	231.47	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2096 643,524	144,168	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	128.70	234.24	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2097 651,242	145,897	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	130.25	237.05	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2098 659,054	147,647	36,000	0	1,800	16,000	30,000	7.000	40,000	46,693	131.81	239.90	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2099 666,959	149,418	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	133,39	242.77	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2100 674,959	151,210	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	134.99	245.68	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2101 683,055	153,024	36,000	0	1,800	16.000	30,000	7,000	40,000	46,693	136.61	248.63	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2102 691,248	154,859	36,000	0	1,800	16.000	30,000	7,000	40,000	46,693	138.25	251.61	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2103 699,539	156,717	36,000	0	1,800	16,000	30,000	7,000	40.000	46,693	139.91	254.63	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2104 707,930	158,597	36,000	0	1,800	16,000	30,000	7,000	40,000	46,693	141.59	257.69	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
2105 716,421	160,499	36,000	0	1,800	16,000	30,000	7,000	40,000	46.693	143.28	260.78	41.69	0.00	1.60	25.00	17.00	8.00	40.00	25.00
YEARS 2000-2005 CON			CICLIDER		12,000	55,500	1,500	70,000	10,000	140.20	200.70	41.09	0.00	1.00	20.00	17.00	0.00	40.00	25.00

YEARS 2000-2005 CONTAIN ACTUAL CONSUMPTION FIGURES

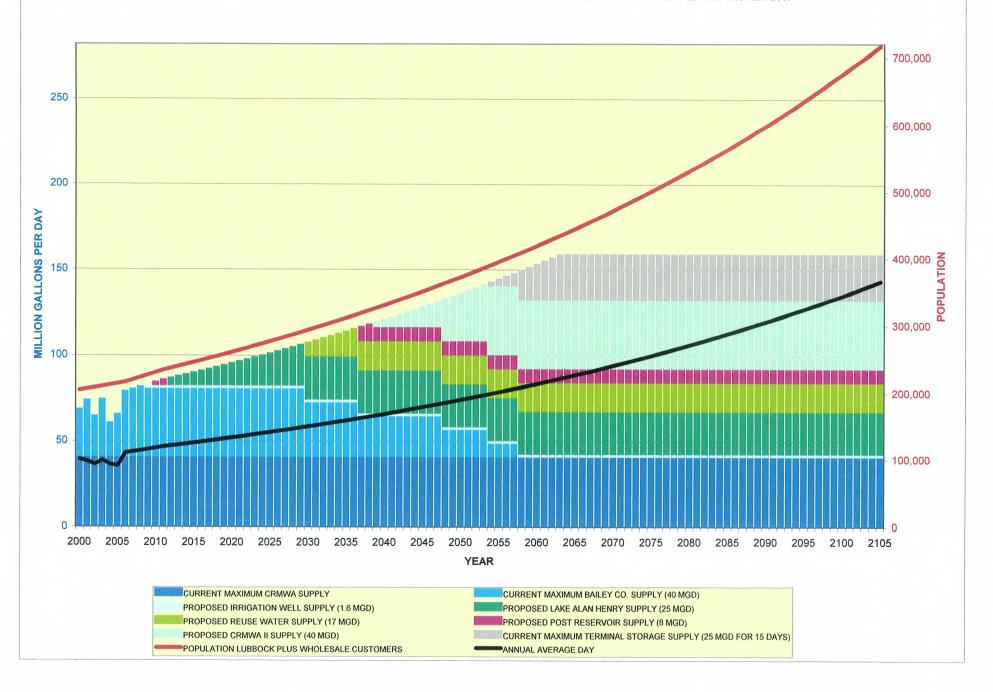
#### 100-YEAR HIGH RANGE WATER SUPPLY MODEL

BASED ON HIGH RANGE POPULATION PROJECTIONS AND ANNUAL AVERAGE 200 GALLONS PER CAPITA PER DAY



#### HIGH RANGE MAXIMUM DAY WATER DEMAND

BASED ON HIGH RANGE POPULATION PROJECTIONS AND ANNUAL AVERAGE 200 GALLONS PER CAPITA PER DAY

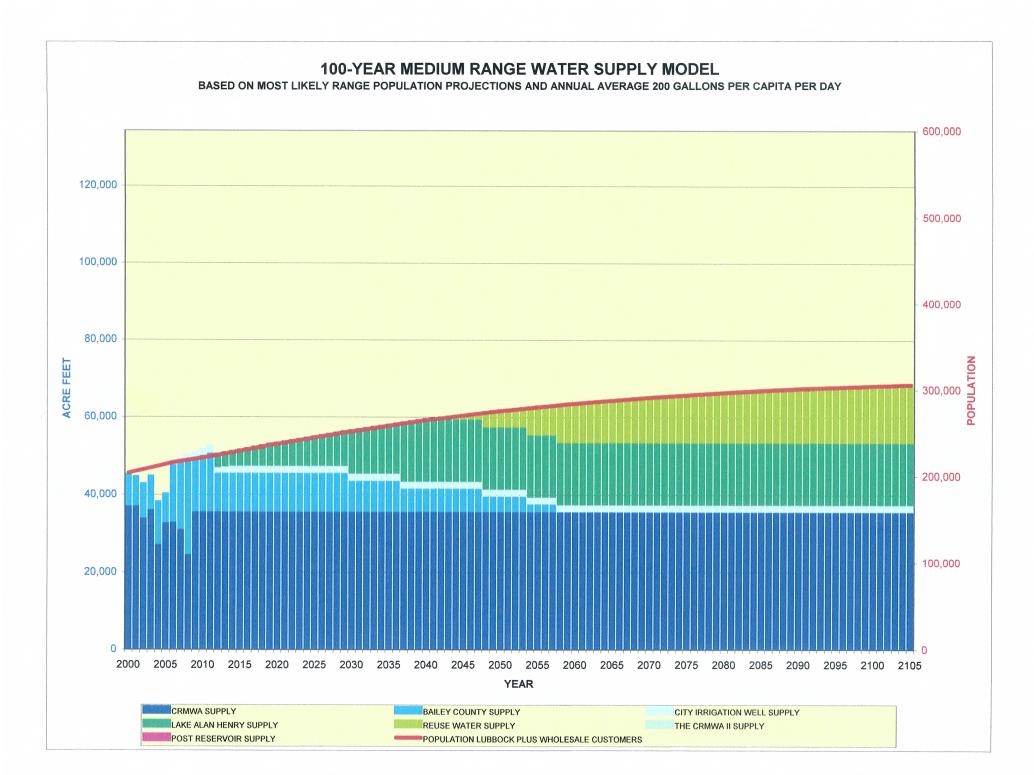


#### 100-YEAR MEDIUM RANGE CASE WATER DEMAND AND SUPPLY MODEL

MAXIMUM	DAY FACTOR	1.82									SCENARIO 2007		MANUAL	1	LEFT GRAPH PE	RIMARY Y-AXIS S	CALE FACTOR		134417	
-	PULATION PROJECTION			- CITY PLANNING		DDV OF	~	***************************************	POPULATIO	ON OPTION:	200		0		RIGHT GRAPH	PRIMARY Y-AXIS	SCALE FACTOR	?	218	
	NNUAL PERCENT R				IA PER DAY (GPC)	PU) OF:					0.00%		0.00%							
	POPULATION	MEDIUM		DAUEN	CITY	1 41/5 41 411	DELIGE	DODE	7.15	CRMWA	MEDIUM R		CURRENT	CURRENT				PROPOSED		CURRENT MAXIMUM
	LUBBOCK PLUS	RANGE WATER	CRMWA	BAILEY	IRRIGATION WELL	LAKE ALAN HENRY	REUSE WATER	POST RESERVOIR	THE CRMWA II	AQUEDUCT SUPPLY	ANNUAL AVERAGE	MAXIMUM DAY	MAXIMUM CRMWA	MAXIMUM BAILEY CO.	WELL	LAKE ALAN HENRY	REUSE WATER	POST RESERVOIR	CRMWA II SUPPLY	TERMINAL STORAGE SUPPLY
	WHOLESALE	DEMAND	SUPPLY	SUPPLY	SUPPLY	SUPPLY	SUPPLY	SUPPLY	SUPPLY	CAPACITY	DAY	(MGD)	SUPPLY	SUPPLY	SUPPLY	SUPPLY	SUPPLY	SUPPLY	(40 MGD)	(25 MGD FOR 15 DAYS
YEAR 2000	CUSTOMERS 203,454	(ACRE FEET) 44,950	(ACRE FEET) 37,511	(ACRE FEET) 7,439	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET) 46,693	(MGD) 39.51	67.82	(41.69 MGD) 41.69	(40 MGD) 26.13	(1.6 MGD) 0.00	(25 MGD) 0.00	(17 MGD) 0.00	(8 MGD) 0.00	0.00	0.00
2001	205,402	44,398	37,516	6,882						46,693	38.35	73.09	41.69	31.40	0.00	0.00	0.00	0.00	0.00	0.00
2002	207,369 209,357	42,561 44,515	34,380 36,566	8,181 7,948						46,693 46,693	36.57 38.84	63,91 73.61	41.69 41.69	22.22 31.92	0.00	0.00	0.00	0.00	0.00	0.00
2004	211,348	37,949	27,546	10,403						46,693	36.41	59.94	41.69	18.25	0.00	0.00	0.00	0.00	0.00	0.00
2005 2006	213,390 215,533	39,988 48,286	33,187 33,352	6,801 14,734	200	0	0	0	0	46,693 46,693	35.70 43.11	64.97 78.45	41.69	23.28	0.00	0.00	0.00	0.00	0.00	0.00
2007	216,854	48,582	31,499	17,173	400	0	0	0	0	46,693	43.37	78.93	41.69 41.69	36.76 37.24	0.00	0.00	0.00	0.00	0.00	0.00
2008	218,185 219,526	48,880 49,180	25,000 36,000	24,270 13,882	600 800	0	0	0	0	46,693	43.64	79.42	41.69	37.73	0.00	0.00	0.00	0.00	0.00	0.00
2010	220,817	49,469	36,000	14,507	1,000	0	0	0	0	46,693 46,693	43.91 44.16	79.91 80.38	41.69 41.69	38.22 38.69	0.00	0.00	0.00	0.00	0.00	0.00
2011	222,410 224,015	49,826	36,000	15,146	1,200	0	0	0	0	46,693	44.48	80.96	41.69	39.27	0.00	0.00	0.00	0.00	0.00	0.00
2012	225,631	50,186 50,548	36,000 36,000	10,000	1,400 1,600	2,786 2,948	0	0	0	46,693 46,693	44.80 45.13	81.54 82.13	41.69 41.69	39.85 40.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	227,259	50,913	36,000	10,000	1,800	3,113	0	0	0	46,693	45.45	82.72	41.69	40.00	1.03	0.00	0.00	0.00	0.00	0.00
2015 2016	228,899 230,551	51,280 51,650	36,000 36,000	10,000	1,800 1,800	3,480 3,850	0	0	0	46,693 46,693	45.78 46.11	83.32 83.92	41.69 41.69	40.00	1.60 1.60	0.03 0.63	0.00	0.00	0.00	0.00
2017	232,214	52,023	36,000	10,000	1,800	4,223	0	0	0	46,693	46.44	84.53	41.69	40.00	1.60	1.24	0.00	0.00	0.00	0.00
2018 2019	233,890 235,577	52,398 52,776	36,000 36,000	10,000	1,800 1,800	4,598 4,976	0	0	0	46,693 46,693	46.78 47.12	85.14 85.75	41.69 41.69	40.00 40.00	1.60 1.60	1.85 2.46	0.00	0.00	0.00	0.00 0.00
2020	236,749	53,039	36,000	10,000	1,800	5,239	0	0	0	46,693	47.35	86.18	41.69	40.00	1.60	2.89	0.00	0.00	0.00	0.00
2021	238,207 239,673	53,365 53,694	36,000 36,000	10,000	1,800 1,800	5,565 5,894	0	0	0	46,693 46,693	47.64 47.93	86.71 87.24	41.69 41.69	40.00 40.00	1.60 1.60	3.42	0.00	0.00	0.00	0.00
2023	241,149	54,024	36,000	10,000	1,800	6,224	0	0	0	46,693	48.23	87.78	41.69	40.00	1.60	3.95 4.49	0.00	0.00	0.00	0.00
2024 2025	242,634 244,128	54,357 54,692	36,000 36,000	10,000	1,800 1,800	6,557 6,892	0	0	0	46,693 46,693	48.53 48.83	88.32 88.86	41.69 41.69	40.00	1.60 1.60	5.03 5.57	0.00	0.00	0.00	0.00
2026	245,631	55,028	36,000	10,000	1,800	7,228	0	0	0	46,693	49.13	89.41	41.69	40.00	1.60	6.12	0.00	0.00	0.00	0.00
2027 2028	247,144 248,665	55,367 55,708	36,000 36,000	10,000	1,800 1,800	7,567	0	0	0	46,693	49.43	89.96	41.69	40.00	1.60	6.67	0.00	0.00	0.00	0.00
2029	250,197	56,051	36,000	10,000	1,800	7,908 8,251	0	0	0	46,693 46,693	49.73 50.04	90.51 91.07	41.69 41.69	40.00	1.60 1.60	7.22 7.78	0.00	0.00	0.00	0.00
2030	251,326 252,610	56,304 56,592	36,000	8,000	1,800	10,504	0	0	0	46,693	50.27	91.48	41.69	32.00	1.60	16.19	0.00	0.00	0.00	0.00
2032	253,900	56,881	36,000 36,000	8,000 8,000	1,800 1,800	10,792 11,081	0	0	0	46,693 46,693	50.52 50.78	91.95 92.42	41.69 41.69	32.00 32.00	1.60 1.60	16.66 17.13	0.00	0.00	0.00	0.00
2033	255,197	57,171	36,000	8,000	1,800	11,371	0	0	0	46,693	51.04	92.89	41.69	32.00	1.60	17.60	0.00	0.00	0.00	0.00
2034 2035	256,500 257,810	57,463 57,757	36,000 36,000	8,000 8,000	1,800 1,800	11,663 11,957	0	0	0	46,693 46,693	51.30 51.56	93.37 93.84	41.69 41.69	32.00 32.00	1.60 1.60	18.08 18.55	0.00	0.00	0.00	0.00
2036	259,127	58,052	36,000	8,000	1,800	12,252	0	0	0	46,693	51.83	94.32	41.69	32.00	1.60	19.03	0.00	0.00	0.00	0.00
2037	260,451 261,781	58,348 58,647	36,000 36,000	6,000 6,000	1,800 1,800	14,548 14,847	0	0	0	46,693 46,693	52.09 52.36	94.80 95.29	41.69 41.69	24.00	1.60 1.60	25.00 25.00	0.00	3.00	0.00	0.00
2039	263,118	58,946	36,000	6,000	1,800	15,146	0	0	0	46,693	52.62	95.78	41.69	24.00	1.60	25.00	0.00	3.49	0.00	0.00
2040	264,163 265,238	59,180 59,421	36,000 36,000	6,000 6,000	1,800 1,800	15,380 15,621	0	0	0	46,693 46,693	52.83 53.05	96.16 96.55	41.69 41.69	24.00 24.00	1.60 1.60	25.00 25.00	0.00	3.87 4.26	0.00	0.00
2042	266,317	59,663	36,000	6,000	1,800	15,863	0	0	0	46,693	53.26	96.94	41.69	24.00	1.60	25.00	0.00	4.65	0.00	0.00
2043	267,400 268,488	59,905 60,149	36,000 36,000	6,000 6,000	1,800	16,000 16,000	105	0	0	46,693	53.48	97.33	41.69	24.00	1.60	25.00	5.04	0.00	0.00	0.00
2045	269,580	60,394	36,000	6,000	1,800 1,800	16,000	349 594	0	0	46,693 46,693	53.70 53.92	97.73 98.13	41.69 41.69	24.00 24.00	1.60 1.60	25.00 25.00	5.44	0.00	0.00	0.00
2046	270,677 271,778	60,639 60,886	36,000	6,000	1,800	16,000	839	0	0	46,693	54.14	98.53	41.69	24.00	1.60	25.00	6.24	0.00	0.00	0.00
2048	272,883	61,134	36,000 36,000	6,000 4,000	1,800 1,800	16,000 16,000	1,086 3,334	0	0	46,693 46,693	54.36 54.58	98.93 99.33	41.69 41.69	24.00 16.00	1.60	25.00 25.00	15.04	0.00	0.00	0.00
2049 2050	273,993 274,909	61,382 61,588	36,000	4,000	1,800	16,000	3,582	0	0	46,693	54.80	99.73	41.69	16.00	1.60	25.00	15.44	0.00	0.00	0.00
2051	275,788	61,784	36,000 36,000	4,000 4,000	1,800 1,800	16,000 16,000	3,788 3,984	0	0	46,693 46,693	54.98 55.16	100.07	41.69 41.69	16.00 16.00	1,60 1.60	25.00 25.00	15.78 16.10	0.00	0.00	0.00
2052 2053	276,669	61,982	36,000	4,000	1,800	16,000	4,182	0	0	46,693	55.33	100.71	41.69	16.00	1.60	25.00	16.42	0.00	0.00	0.00
2054	277,554 278,441	62,180 62,379	36,000 36,000	4,000 2,000	1,800 1,800	16,000 16,000	4,380 6,579	0	0	46,693 46,693	55.51 55.69	101.03 101.35	41.69	16.00 8.00	1.60	25.00 25.00	16.74 17.00	0.00 8.00	0.00	0.00
2055	279,331	62,578	36,000	2,000	1,800	16,000	6,778	0	0	46,693	55.87	101.68	41.69	8.00	1.60	25.00	17.00	8.00	0.39	0.00
2056 2057	280,224 281,120	62,778 62,979	36,000 36,000	2,000 2,000	1,800 1,800	16,000 16,000	6,978 7,179	0	0	46,693 46,693	56.04 56.22	102.00 102.33	41.69 41.69	8.00 8.00	1.60 1.60	25.00 25.00	17.00 17.00	8.00 8.00	0.71 1.04	0.00
2058	282,019	63,180	36,000	0	1,800	16,000	9,380	0	0	46,693	56.40	102.65	41.69	0.00	1.60	25.00	17.00	8.00	9.36	0.00
2059 2060	282,920 283,697	63,382 63,556	36,000 36,000	0	1,800 1,800	16,000 16,000	9,582 9,756	0	0	46,693 46,693	56.58 56.74	102.98 103.27	41.69 41.69	0.00	1.60 1.60	25.00 25.00	17.00 17.00	8.00 8.00	9.69 9.98	0.00
2061	284,410	63,716	36,000	0	1,800	16,000	9,916	0	0	46,693	56.88	103.53	41.69	0.00	1.60	25.00	17.00	8.00	10.24	0.00
2062	285,124 285,840	63,876 64,036	36,000 36,000	0	1,800 1,800	16,000 16,000	10,076 10,236	0	0	46,693 46,693	57.02 57.17	103.79 104.05	41.69 41.69	0.00	1.60	25.00 25.00	17.00 17.00	8.00 8.00	10.50 10.76	0.00
2064	286,558	64,197	36,000	0	1,800	16,000	10,397	0	0	46,693	57.31	104.03	41.69	0.00	1.60	25.00	17.00	8.00	11.02	0.00
2065 2066	287,278 287,999	64,358 64,520	36,000	0	1,800	16,000	10,558	0	0	46,693	57.46	104.57	41.69	0.00	1.60	25.00	17.00	8.00	11.28	0.00
2067	288,722	64,682	36,000 36,000	0	1,800 1,800	16,000 16,000	10,720 10,882	0	0	46,693 46,693	57.60 57.74	104.83 105.09	41.69 41.69	0.00	1.60 1.60	25.00 25.00	17.00 17.00	8.00 8.00	11.54 11.80	0.00
2068	289,448	64,845	36,000	0	1,800	16,000	11,045	0	0	46,693	57.89	105.36	41.69	0.00	1.60	25.00	17.00	8.00	12.07	0.00
2069	290,175 290,824	65,007 65,153	36,000 36,000	0	1,800 1,800	16,000 16,000	11,207 11,353	0	0	46,693 46,693	58.03 58.16	105.62 105.86	41.69 41.69	0.00	1.60	25.00 25.00	17.00 17.00	8.00 8.00	12.33 12.57	0.00
2071	291,412	65,285	36,000	0	1,800	16,000	11,485	0	0	46,693	58.28	106.07	41.69	0.00	1.60	25.00	17.00	8.00	12.78	0.00
2072	292,002 292,592	65,417 65,549	36,000 36,000	0	1,800 1,800	16,000 16,000	11,617 11,749	0	0	46,693 46,693	58.40 58.52	106.29 106.50	41.69 41.69	0.00	1.60 1.60	25.00 25.00	17.00 17.00	8.00 8.00	13.00	0.00
2074	293,184	65,682	36,000	0	1,800	16,000	11,882	0	0	46,693	58.64	106.72	41.69	0.00	1.60	25.00	17.00	8.00	13.21 13.43	0.00
2075 2076	293,777 294,371	65,814 65,948	36,000 36,000	0	1,800 1,800	16,000	12,014	0	0	46,693	58.76	106.93	41.69	0.00	1.60	25.00	17.00	8.00	13.64	0.00
2010	204,311	05,540	30,000	<u> </u>	1,000	16,000	12,148	0	<u> </u>	46,693	58.87	107.15	41.69	0.00	1.60	25.00	17.00	8.00	13.86	0.00

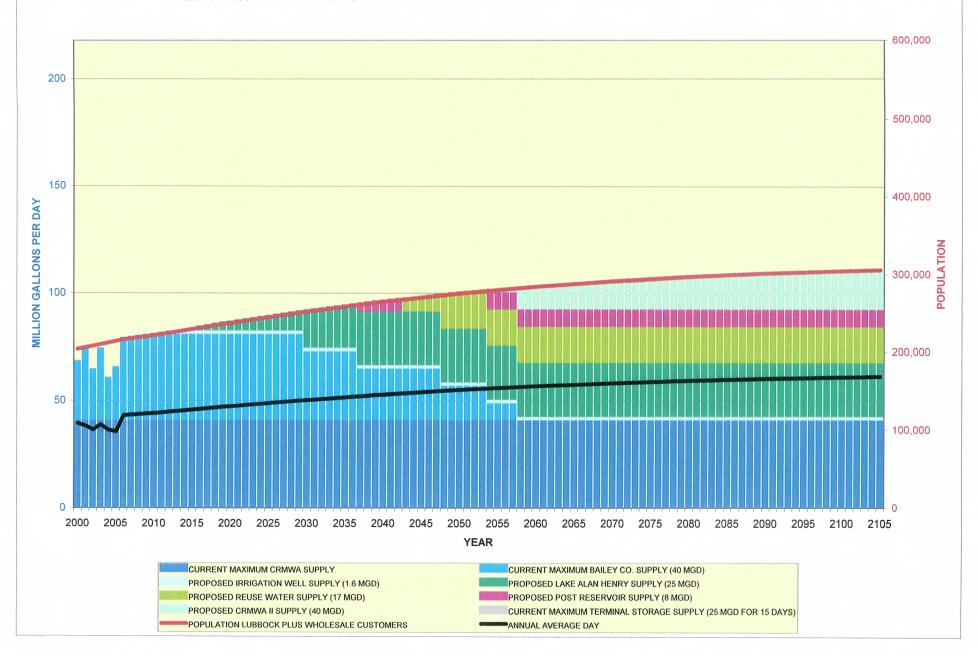
#### 100-YEAR MEDIUM RANGE CASE WATER DEMAND AND SUPPLY MODEL

MAXIMUM DAY FACTOR 1.82		SCENANO 2007	[	MANUAL		LEFT GRAPH PR	IMARY Y-AXIS S	CALE FACTOR		134417	
INNUAL POPULATION PROJECTIONS - MEDIUM RANGE - CITY PLANNING ESTIMATES POI	POPULATION OPTION:	2	[	0		RIGHT GRAPH P	RIMARY Y-AXIS	SCALE FACTOR		218	
VATER DEMAND PROJECTIONS BASED ON AVERAGE ANNUAL GALLONS PER CAPITA PER DAY (GPCPD) OF:		200		0							
IVERAGE ANNUAL PERCENT REDUCTION DUE WATER SAVING FIXTURES OF:		0.00%	-	0.00%							
2077 294,966 66,081 36,000 0 1,800 16,000 12,281 0 0	0 46,693	58.99	107.37	41.69	0.00	1.60	25.00	17.00	8.00	14.08	0.00
2078 295,563 66,215 36,000 0 1,800 16,000 12,415 0 0	0 46,693	59.11	107.58	41.69	0.00	1.60	25.00	17.00	8.00	14.29	0.00
2079 296,161 66,349 36,000 0 1,800 16,000 12,549 0 0	0 46,693	59.23	107.80	41.69	0.00	1.60	25.00	17.00	8.00	14.51	0.00
2080 298,709 66,471 36,000 0 1,800 16,000 12,671 0 0	0 46,693	59.34	108.00	41.69	0.00	1.60	25.00	17.00	8.00	14.71	0.00
2081 297,164 66,573 36,000 0 1,800 16,000 12,773 0 0	0 46,693	59.43	108.17	41.69	0.00	1.60	25.00	17.00	8.00	14.88	0.00
2082 297,619 66,675 36,000 0 1,800 16,000 12,875 0 0	0 46,693	59.52	108.33	41.69	0.00	1.60	25.00	17.00	8.00	15.04	0.00
2083 298,076 66,778 36,000 0 1,800 16,000 12,978 0 0	0 46,693	59.62	108.50	41.69	0.00	1.60	25.00	17.00	8.00	15.21	0.00
2084 298,533 66,880 36,000 0 1,800 16,000 13,080 0 0	0 40,083	59.71	108.67	41.69	0.00	1.60	25.00	17.00	8.00	15.38	0.00
2085 298,990 66,982 36,000 0 1,800 16,000 13,182 0 0	0 40,000	59.80	108.83	41.69	0.00	1.60	25.00	17.00	8.00	15.54	0.00
2086 299,449 67,085 36,000 0 1,800 16,000 13,285 0 0	0 40,000	59.89	109.00	41.69	0.00	1.60	25.00	17.00	8.00	15.71	0.00
2087 299,908 67,188 36,000 0 1,800 16,000 13,388 0 0	0 46,693	59.98	109.17	41.69	0.00	1.60	25.00	17.00	8.00	15.88	0.00
2088 300,368 67,291 36,000 0 1,800 16,000 13,491 0 0	0 46,693	60.07	109.33	41.69	0.00	1.60	25.00	17.00	8.00	16.04	0.00
2089 300,829 67,394 36,000 0 1,800 16,000 13,594 0 0	0 46,693	60.17	109.50	41.69	0.00	1.60	25.00	17.00	8.00	16.21	0.00
2090 301,261 67,491 36,000 0 1,800 16,000 13,691 0 0	0 46,693	60.25	109.66	41.69	0.00	1.60	25.00	17.00	8.00	16.37	0.00
2091 301,576 67,562 36,000 0 1,800 16,000 13,762 0 0	0 46,693	60.32	109.77	41.69	0.00	1.60	25.00	17.00	8.00	16.48	0.00
2092 301,891 67,632 36,000 0 1,800 16,000 13,832 0 0	0 46,693	60.38	109.89	41.69	0.00	1.60	25.00	17.00	8.00	16.60	0.00
2093 302,206 67,703 36,000 0 1,800 16,000 13,903 0 0	0 46,693	60.44	110.00	41.69	0.00	1.60	25.00	17.00	8.00	16.71	0.00
2094 302,522 67,774 36,000 0 1,800 16,000 13,974 0 0	0 46,693	60.50	110.12	41.69	0.00	1.60	25.00	17.00	8.00	16.83	0.00
2095 302,838 67,845 36,000 0 1,800 16,000 14,045 0 0	0 46,693	60.57	110.23	41.69	0.00	1.60	25.00	17.00	8.00	16.94	0.00
2096 303,155 67,915 36,000 0 1,800 16,000 14,115 0 0	0 46,693	60.63	110.35	41.69	0.00	1.60	25.00	17.00	8.00	17.06	0.00
2097 303,472 67,986 36,000 0 1,800 16,000 14,186 0 0	0 46,693	60.69	110.46	41.69	0.00	1.60	25.00	17.00	8.00	17.17	0.00
2098 303,789 68,057 36,000 0 1,800 16,000 14,257 0 0	0 46,693	60.76	110.58	41.69	0.00	1.60	25.00	17.00	8.00	17.29	0.00
2099 304,107 68,129 36,000 0 1,800 16,000 14,329 0 0	0 46,693	60.82	110.69	41.69	0.00	1.60	25.00	17.00	8.00	17.40	0.00
2100 304,411 68,197 36,000 0 1,800 16,000 14,397 0 0	0 46,693	60.88	110.81	41.69	0.00	1.60	25.00	17.00	8.00	17.52	0.00
2101 304,729 68,268 36,000 0 1,800 16,000 14,468 0 0	0 46,693	60.95	110.92	41.69	0.00	1.60	25.00	17.00	8.00	17.63	0.00
2102 305,048 68,340 36,000 0 1,800 16,000 14,540 0 0	0 46,693	61.01	111.04	41.69	0.00	1.60	25.00	17.00	8.00	17.75	0.00
2103 305,367 68,411 36,000 0 1,800 16,000 14,611 0 0	0 46,693	61.07	111.15	41.69	0.00	1.60	25.00	17.00	8.00	17.86	0.00
2104 305,687 68,483 36,000 0 1,800 16,000 14,683 0 0	0 46,693	61.14	111.27	41.69	0.00	1.60	25.00	17.00	8.00	17.98	0.00
2105   306,006   68,554   38,000   0   1,800   16,000   14,754   0   0 /EARS 2000-2005 CONTAIN ACTUAL CONSUMPTION FIGURES	0 46,693	61.20	111.39	41.69	0.00	1.60	25.00	17.00	8.00	18.10	0.00



#### MEDIUM RANGE MAXIMUM DAY WATER DEMAND

BASED ON MOST LIKELY RANGE POPULATION PROJECTIONS AND ANNUAL AVERAGE 200 GALLONS PER CAPITA PER DAY



#### 100-YEAR LOW RANGE WATER DEMAND AND SUPPLY MODEL

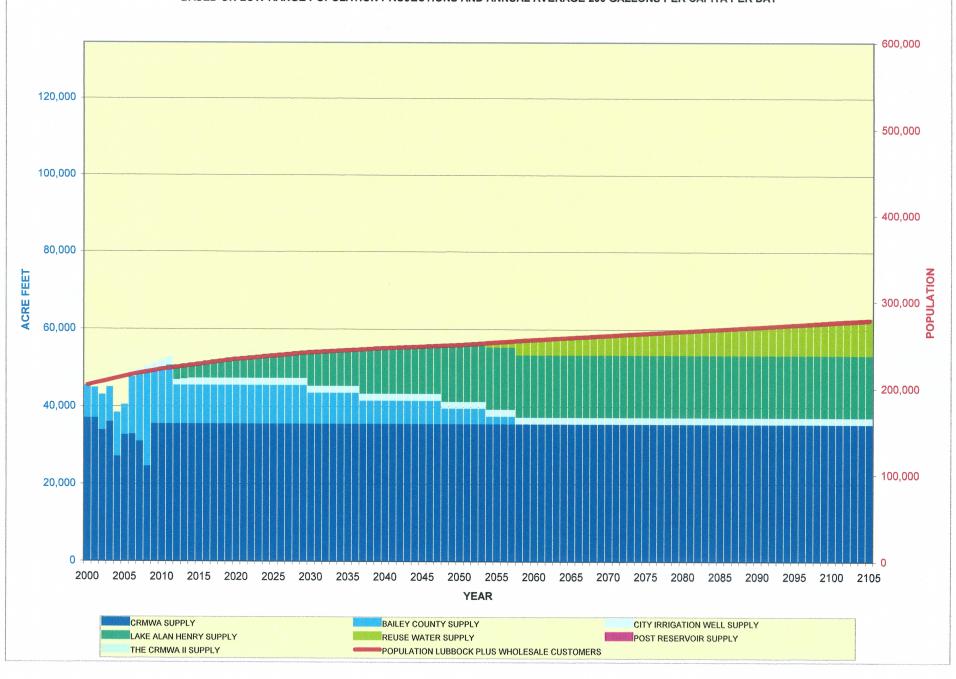
MAXIMUN	DAY FACTOR	1,82	1								SCENARIO 2017	1 1	MANUAL	1	LEFT GRAPH PE	RIMARY Y-AXIS SI	CALE FACTOR	T	134417	
ANNUAL PO	PULATION PROJEC	TIONS -	LOW RANGE - RI		PLAN/TWDB ESTIM				POPULATION	ON OPTION:	1		0			PRIMARY Y-AXIS			218	
	MAND PROJECTION  NNUAL PERCENT F	***	The body and the same and the s		PITA PER DAY (GPO	CPD) OF:		***************************************			0.00%		0.00%	1						
AVERAGE	POPULATION	LOW	WATER SAVING		CITY					CRMWA	LOW RA		CURRENT	CURRENT	PROPOSED	PROPOSED	PROPOSED	PROPOSED	PROPOSED	CURRENT MAXIMUM
	LUBBOCK PLUS	RANGE WATER	CRMWA	BAILEY	IRRIGATION WELL	LAKE ALAN HENRY	REUSE WATER	POST RESERVOIR	THE CRMWA II	AQUEDUCT SUPPLY	ANNUAL AVERAGE	MAXIMUM DAY	MAXIMUM CRMWA	MAXIMUM BAILEY CO.	IRRIGATION WELL	LAKE ALAN	REUSE	POST	CRMWA II	TERMINAL STORAGE
	WHOLESALE	DEMAND	SUPPLY	SUPPLY	SUPPLY	SUPPLY	SUPPLY	SUPPLY	SUPPLY	CAPACITY	DAY	(MGD)	SUPPLY	SUPPLY	SUPPLY	HENRY SUPPLY	WATER SUPPLY	RESERVOIR SUPPLY	SUPPLY (40 MGD)	SUPPLY (25 MGD FOR 15 DAYS)
2000	CUSTOMERS 203,454	(ACRE FEET) 44,950	(ACRE FEET) 37,511	(ACRE FEET) 7,439	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET)	(ACRE FEET) 46,693	(MGD) 39.51	67.82	(41.69 MGD) 41.69	(40 MGD) 26.13	(1.6 MGD) 0.00	(25 MGD) 0.00	(17 MGD) 0.00	(8 MGD) 0.00	0.00	0.00
2001	205,402	44,398	37,516	6,882						46,693	38.35	73.09	41.69	31.40	0.00	0.00	0.00	0.00	0.00	0.00
2002	207,369 209,357	42,561 44,515	34,380 36,566	8,181 7,948						46,693 46,693	36.57 38.84	63.91 73.61	41.69 41.69	22.22 31.92	0.00	0.00	0.00	0.00	0.00	0.00
2004	211,348	37,949	27,546	10,403						46,693	36.41	59.94	41.69	18.25	0.00	0.00	0.00	0.00	0.00	0.00
2005	213,390 215,533	39,988 48,286	33,187 33,352	6,801 14,734	200	0	0	0	0	46,693 46,693	35.70 43.11	64.97 78.45	41.69 41.69	23.28 36.76	0.00	0.00	0.00	0.00	0.00	0.00
2007	217,069	48,630	31,499	17,173	400	0	0	0	0	46,693	43.41	79.01	41.69	37.32	0.00	0.00	0.00	0.00	0.00	0.00
2008	218,617 220,177	48,976 49,326	25,000 36,000	24,270 13,882	600 800	0	0	0	0	46,693 46,693	43.72 44.04	79.58 80.14	41.69 41.69	37.89 38.45	0.00	0.00	0.00	0.00	0.00	0.00
2010	221,675	49,662	36,000	14,507	1,000	0	0	0	0	46,693	44.34	80.69	41.69	39.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	222,844 224,020	49,923 50,187	36,000 36,000	15,146 10,000	1,200 1,400	2,787	0	0	0	46,693 46,693	44.57 44.80	81.12 81.54	41.69 41.69	39.43 39.85	0.00	0.00	0.00	0.00	0.00	0.00
2013	225,203	50,452	36,000	10,000	1,600	2,852	0	0	0	46,693	45.04	81.97	41.69	40.00	0.28	0.00	0.00	0.00	0.00	0.00
2014 2015	226,394 227,591	50,719 50,987	36,000 36,000	10,000	1,800 1,800	2,919 3,187	0	0	0	46,693 46,693	45.28 45.52	82.41 82.84	41.69 41.69	40.00	0.72 1.15	0.00	0.00	0.00	0.00	0.00
2016	228,796	51,257	36,000	10,000	1,800	3,457	0	0	0	46,693	45.76	83.28	41.69	40.00	1.59	0.00	0.00	0.00	0.00	0.00
2017 2018	230,007 231,227	51,528 51,801	36,000 36,000	10,000	1,800 1,800	3,728 4,001	0	0	0	46,693 46,693	46.00 46.25	83.72 84.17	41.69 41.69	40.00 40.00	1.60	0.43 0.88	0.00	0.00	0.00	0.00
2019 2020	232,454 233,407	52,076	36,000	10,000	1,800	4,276	0	0	0	46,693	46.49	84.61	41.69	40.00	1.60	1.32	0.00	0.00	0.00	0.00
2021	234,181	52,290 52,463	36,000 36,000	10,000 10,000	1,800 1,800	4,490 4,663	0	0	0	46,693 46,693	46.68 46.84	84.96 85.24	41.69 41.69	40.00	1.60	1.67 1.95	0.00	0.00	0.00	0.00
2022	234,958 235,739	52,637 52,812	36,000	10,000	1,800	4,837	0	0	0	46,693	46.99	85.52	41.69	40.00	1.60	2.23	0.00	0.00	0.00	0.00
2024	236,523	52,988	36,000 36,000	10,000	1,800 1,800	5,012 5,188	0	0	0	46,693 46,693	47.15 47.30	85.81 86.09	41.69 41.69	40.00	1.60	2.52	0.00	0.00	0.00	0.00
2025 2026	237,311 238,102	53,164 53,342	36,000	10,000	1,800	5,364	0	0	0	46,693	47.46	86.38	41.69	40.00	1.60	3.09	0.00	0.00	0.00	0.00
2027	238,897	53,520	36,000 36,000	10,000	1,800 1,800	5,542 5,720	0	0	0	46,693 46,693	47.62 47.78	86.67 86.96	41.69 41.69	40.00	1.60	3.38	0.00	0.00	0.00	0.00
2028 2029	239,695 240,497	53,699 53,878	36,000	10,000	1,800	5,899	0	0	0	46,693	47.94	87.25	41.69	40.00	1.60	3.96	0.00	0.00	0.00	0.00
2030	241,147	54,024	36,000 36,000	10,000 8,000	1,800 1,800	6,078 8,224	0	0	0	46,693 46,693	48.10 48.23	87.54 87.78	41.69 41.69	40.00 32.00	1.60	4.25 12.49	0.00	0.00	0.00	0.00
2031	241,633 242,121	54,133 54,242	36,000 36,000	8,000 8,000	1,800 1,800	8,333	0	0	0	46,693	48.33	87.95	41.69	32.00	1.60	12.66	0.00	0.00	0.00	0.00
2033	242,610	54,352	36,000	8,000	1,800	8,442 8,552	0	0	0	46,693 46,693	48.42 48.52	88.13 88.31	41.69 41.69	32.00 32.00	1.60	12.84 13.02	0.00	0.00	0.00	0.00
2034	243,102 243,595	54,462 54,572	36,000 36,000	8,000 8,000	1,800 1,800	8,662 8,772	0	0	0	46,693	48.62	88.49	41.69	32.00	1.60	13.20	0.00	0.00	0.00	0.00
2036	244,089	54,683	36,000	8,000	1,800	8,883	0	0	0	46,693 46,693	48.72 48.82	88.67 88.85	41.69 41.69	32.00 32.00	1.60	13.38 13.56	0.00	0.00	0.00	0.00
2037	244,586 245,084	54,794 54,906	36,000 36,000	6,000 6,000	1,800 1,800	10,994 11,106	0	0	0	46,693	48.92	89.03	41.69	24.00	1.60	21.74	0.00	0.00	0.00	0.00
2039	245,584	55,018	36,000	6,000	1,800	11,218	0	0	0	46,693 46,693	49.02 49.12	89.21 89.39	41.69 41.69	24.00 24.00	1.60	21.92 22.10	0.00	0.00	0.00	0.00
2040	246,008 246,398	55,113 55,200	36,000 36,000	6,000	1,800 1,800	11,313 11,400	0	0	0	46,693	49.20	89.55 89.69	41.69	24.00	1.60	22.26	0.00	0.00	0.00	0.00
2042	246,790	55,288	36,000	6,000	1,800	11,488	0	0	0	46,693 46,693	49.28 49.36	89.83	41.69 41.69	24.00 24.00	1.60	22.40 22.54	0.00	0.00	0.00	0.00
2043 2044	247,182 247,576	55,376 55,464	36,000 36,000	6,000	1,800 1,800	11,576 11,664	0	0	0	46,693 46,693	49.44 49.52	89.97 90.12	41.69 41.69	24.00 24.00	1.60 1.60	22.68 22.83	0.00	0.00	0.00	0.00
2045	247,971	55,553	36,000	6,000	1,800	11,753	0	0	0	46,693	49.59	90.26	41.69	24.00	1.60	22.97	0.00	0.00	0.00	0.00
2046 2047	248,368 248,766	55,642 55,731	36,000 36,000	6,000 6,000	1,800 1,800	11,842 11,931	0	0	0	46,693 46,693	49.67 49.75	90.41 90.55	41.69 41.69	24.00 24.00	1.60 1.60	23.12 23.26	0.00	0.00	0.00	0.00
2048	249,165	55,820	36,000	4,000	1,800	14,020	0	0	0	46,693	49.83	90.70	41.69	16.00	1.60	25.00	0.00	6.41	0.00	0.00
2049 2050	249,565 249,910	55,910 55,987	36,000 36,000	4,000	1,800 1,800	14,110 14,187	0	0	0	46,693 46,693	49.91 49.98	90.84 90.97	41.69 41.69	16.00 16.00	1.60	25.00 25.00	0.00	6.55 6.68	0.00	0.00
2051	250,502	56,120	36,000	4,000	1,800	14,320	0	0	0	46,693	50.10	91.18	41.69	16.00	1.60	25.00	0.00	6.89	0.00	0.00
2052	251,095 251,690	56,253 56,386	36,000 36,000	4,000	1,800 1,800	14,453 14,586	0	0	0	46,693 46,693	50.22 50.34	91.40 91.62	41.69 41.69	16.00 16.00	1.60	25.00 25.00	0.00	7.11	0.00	0.00
2054 2055	252,287	56,519	36,000	2,000	1,800	16,000	719	0	0	46,693	50.46	91.83	41.69	8.00	1.60	25.00	15.54	0.00	0.00	0.00
2056	252,884 253,484	56,653 56,788	36,000 36,000	2,000 2,000	1,800	16,000 16,000	853 988	0	0	46,693 46,693	50.58 50.70	92.05 92.27	41.69 41.69	8.00 8.00	1.60	25.00 25.00	15.76 15.98	0.00	0.00	0.00
2057	254,085	56,922	36,000	2,000	1,800	16,000	1,122	0	0	46,693	50.82	92.49	41.69	8.00	1.60	25.00	16.20	0.00	0.00	0.00
2058 2059	254,687 255,291	57,057 57,193	36,000 36,000	0	1,800 1,800	16,000 16,000	3,257 3,393	0	0	46,693 46,693	50.94 51.06	92.71 92.93	41.69 41.69	0.00	1.60	25.00 25.00	17.00 17.00	7.42 7.64	0.00	0.00
2060	255,829	57,313	36,000	0	1,800	16,000	3,513	0	0	46,693	51.17	93.12	41.69	0.00	1.60	25.00	17.00	7.83	0.00	0.00
2061	256,318 256,809	57,423 57,533	36,000 36,000	0	1,800 1,800	16,000 16,000	3,623 3,733	0	0	46,693 46,693	51.26 51.36	93.30 93.48	41.69 41.69	0.00	1.60	25.00 25.00	17.00 17.00	8.00 8.00	0.01	0.00
2063	257,300	57,643	36,000	0	1,800	16,000	3,843	0	0	46,693	51.46	93.66	41.69	0.00	1.60	25.00	17.00	8.00	0.37	0.00
2064	257,793 258,286	57,753 57,864	36,000 36,000	0	1,800	16,000 16,000	3,953 4,064	0	0	46,693 46,693	51.56 51.66	93.84 94.02	41.69 41.69	0.00	1.60	25.00 25.00	17.00 17.00	8.00 8.00	0.55 0.73	0.00
2066	258,781	57,974	36,000	0	1,800	16,000	4,174	0	0	46,693	51.76	94.20	41.69	0.00	1.60	25.00	17.00	8.00	0.91	0.00
2067	259,277 259,773	58,085 58,197	36,000 36,000	0	1,800 1,800	16,000 16,000	4,285 4,397	0	0	46,693 46,693	51.86 51.95	94.38 94.56	41.69 41.69	0.00	1.60	25.00 25.00	17.00 17.00	8.00 8.00	1.09	0.00
2069	260,271	58,308	36,000	0	1,800	16,000	4,508	0	0	46,693	52.05	94.74	41.69	0.00	1.60	25.00	17.00	8.00	1.45	0.00
2070	260,770 261,270	58,420 58,532	36,000 36,000	0	1,800 1,800	16,000 16,000	4,620 4,732	0	0	46,693 46,693	52.15 52.25	94.92 95.10	41.69 41.69	0.00	1.60 1.60	25.00 25.00	17.00 17.00	8.00 8.00	1.63 1.81	0.00
2072	261,771	58,644	36,000	0	1,800	16,000	4,844	0	0	46,693	52.35	95.28	41.69	0.00	1.60	25.00	17.00	8.00	1.99	0.00 0.00
2073	262,272 262,775	58,757 58,869	36,000 36,000	0	1,800 1,800	16,000 16,000	4,957 5,069	0	0	46,693 46,693	52.45 52.56	95.47 95.65	41.69 41.69	0.00	1.60 1.60	25.00 25.00	17.00 17.00	8.00 8.00	2.18 2.36	0.00
2075	263,279	58,982	36,000	0	1,800	16,000	5,182	0	0	46,693	52.66	95.83	41.69	0.00	1.60	25.00	17.00	8.00	2.54	0.00
2076	263,784	59,095	36,000	0	1,800	16,000	5,295	0	0	46,693	52.76	96.02	41.69	0.00	1.60	25.00	17.00	8.00	2.73	0.00

#### 100-YEAR LOW RANGE WATER DEMAND AND SUPPLY MODEL

MAXIMUM	DAY FACTOR	1.82	l								SCENARIO 2007		MANUAL		LEFT GRAPH PF	RIMARY Y-AXIS S	CALE FACTOR		134417	
ANNUAL PO	PULATION PROJE	CTIONS -	LOW RANGE - RE	GION O WATER P	LAN/TWDB ESTIN	MTES			POPULATION	ON OPTION:	1		0		RIGHT GRAPH F	RIMARY Y-AXIS	SCALE FACTOR		218	
WATER DEA	AND PROJECTION	IS BASED ON AVE	RAGE ANNUAL G	ALLONS PER CAP	ITA PER DAY (GPO	CPD) OF:					200		0							
AVERAGE A	NNUAL PERCENT	REDUCTION DUE	WATER SAVING F	IXTURES OF:							0.00%		0.00%							
2077	264,291	59,209	36,000	0	1,800	16,000	5,409	0	0	46,693	52.86	96.20	41.69	0.00	1.60	25.00	17.00	8.00	2.91	0.00
2078	264,798	59,322	36,000	0	1,800	16,000	5,522	0	0	46,693	52.96	96.39	41.69	0.00	1.60	25.00	17.00	8.00	3.10	0.00
2079	265,306	59,436	36,000	0	1,800	16,000	5,636	0	0	46,693	53.06	96.57	41.69	0.00	1.60	25.00	17.00	8.00	3.28	0.00
2080	265,815	59,550	36,000	0	1,800	16,000	5,750	0	0	46,693	53.16	96.76	41.69	0.00	1.60	25.00	17.00	8.00	3.47	0.00
2081	266,326	59,665	36,000	0	1,800	16,000	5,865	0	0	46,693	53.27	96.94	41.69	0.00	1.60	25.00	17.00	8.00	3.65	0,00
2082	266,837	59,779	36,000	0	1,800	16,000	5,979	0	0	46,693	53.37	97.13	41.69	0.00	1.60	25.00	17.00	8.00	3.84	0.00
2083	267,350	59,894	36,000	0	1,800	16,000	6,094	0	0	46,693	53.47	97.32	41.69	0.00	1.60	25.00	17.00	8.00	4.03	0.00
2084	267,864	60,009	36,000	0	1,800	16,000	6,209	0	0	46,000	53.57	97.50	41.69	0.00	1.60	25.00	17.00	8.00	4.21	0.00
2085	268,378	60,124	36,000	0	1,800	16,000	6,324	0	0	46,693	53.68	97.69	41.69	0.00	1.60	25.00	17.00	8.00	4.40	0.00
2086	268,894	60,240	36,000	0	1,800	16,000	6,440	0	0	46,693	53.78	97.88	41.69	0.00	1.60	25.00	17.00	8.00	4.59	0.00
2087	269,411	60,356	36,000	0	1,800	16,000	6,556	0	0	46,693	53.88	98.07	41.69	0.00	1.60	25.00	17.00	8.00	4.78	0.00
2088	269,929	60,472	36,000	0	1,800	16,000	6,672	0	0	46,693	53.99	98.25	41.69	0.00	1.60	25.00	17.00	8.00	4.96	0.00
2089	270,448	60,588	36,000	0	1,800	16,000	6,788	0	0	46,693	54.09	98.44	41.69	0.00	1.60	25.00	17.00	8.00	5.15	0.00
2090	270,968 271,489	60,705	36,000		1,800	16,000	6,905	0	0	46,693	54.19	98.63	41.69	0.00	1.60	25.00	17.00	8.00	5.34	0.00
2091	272,012	60,821	36,000	0	1,800	16,000	7,021	0	0	46,693	54.30	98.82	41.69	0.00	1.60	25.00	17.00	8.00	5.53	0.00
		60,938	36,000	0	1,800	16,000	7,138	0	0	46,693	54.40	99.01	41.69	0.00	1.60	25.00	17.00	8.00	5.72	0.00
2093 2094	272,535	61,056	36,000	0	1,800	16,000	7,256	0	0	46,693	54.51	99.20	41.69	0.00	1.60	25.00	17.00	8.00	5.91	0.00
2094	273,060 273,585	61,173 61,291	36,000		1,800	16,000	7,373	0	0	46,693	54.61	99.39	41.69	0.00	1.60	25.00	17.00	8.00	6.10	0.00
2095			36,000	0	1,800	16,000	7,491	0	0	46,693	54.72	99.59	41.69	0.00	1.60	25.00	17.00	8.00	6.30	0.00
2096	274,112	61,409	36,000	0	1,800	16,000	7,609	0	0	46,693	54.82	99.78	41.69	0.00	1.60	25.00	17.00	8.00	6.49	0.00
2097	274,640	61,527	36,000	0	1,800	16,000	7,727	0	0	46,693	54.93	99.97	41.69	0.00	1.60	25.00	17.00	8.00	6.68	0.00
2098	275,169 275,699	61,646 61,765	36,000	0	1,800	16,000	7,846	0	0	46,693	55.03	100.16	41.69	0.00	1.60	25.00	17.00	8.00	6.87	0.00
			36,000	0	1,800	16,000	7,965	0	0	46,693	55.14	100.35	41.69	0.00	1.60	25.00	17.00	8.00	7.06	0.00
2100	276,230	61,884	36,000	0	1,800	16,000	8,084	0	0	46,693	55.25	100.55	41.69	0.00	1.60	25.00	17.00	8.00	7.26	0.00
2101	276,763	62,003	36,000	0	1,800	16,000	8,203	0	0	46,693	55.35	100.74	41.69	0.00	1.60	25.00	17.00	8.00	7.45	0.00
2102	277,296	62,122	36,000	0	1,800	16,000	8,322	0	0	46,693	55.46	100.94	41.69	0.00	1.60	25.00	17.00	8.00	7.65	0.00
2103	277,831	62,242	36,000	0	1,800	16,000	8,442	0	0	46,693	55.57	101.13	41.69	0.00	1.60	25.00	17.00	8.00	7.84	0.00
2104	278,366	62,362	36,000	0	1,800	16,000	8,562	0	0	46,693	55.67	101.33	41.69	0.00	1.60	25.00	17.00	8.00	8.04	0.00
2105	278,903	62,482	36,000	0	1,800	16,000	8,682	0	0	46,693	55.78	101.52	41.69	0.00	1.60	25.00	17.00	8.00	8.23	0.00

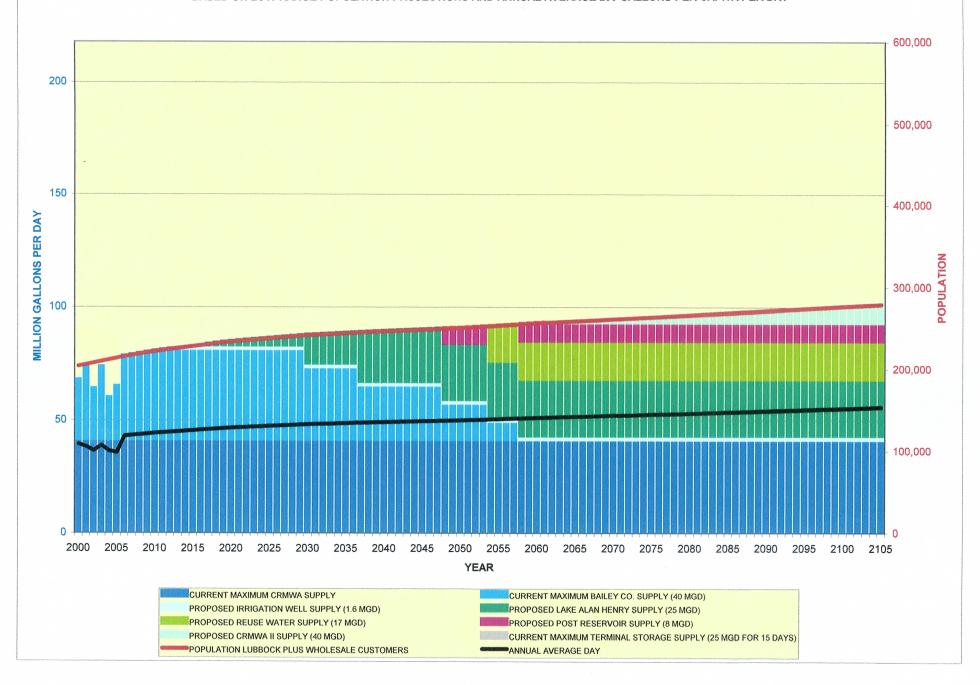
#### 100-YEAR LOW RANGE WATER SUPPLY MODEL

BASED ON LOW RANGE POPULATION PROJECTIONS AND ANNUAL AVERAGE 200 GALLONS PER CAPITA PER DAY



#### LOW RANGE MAXIMUM DAY WATER DEMAND

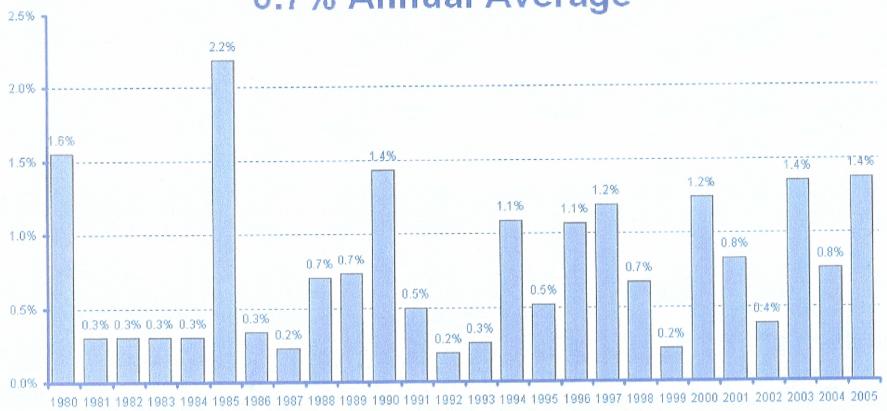
BASED ON LOW RANGE POPULATION PROJECTIONS AND ANNUAL AVERAGE 200 GALLONS PER CAPITA PER DAY



# Section 3 – Water Supply Models for the next 100 Years

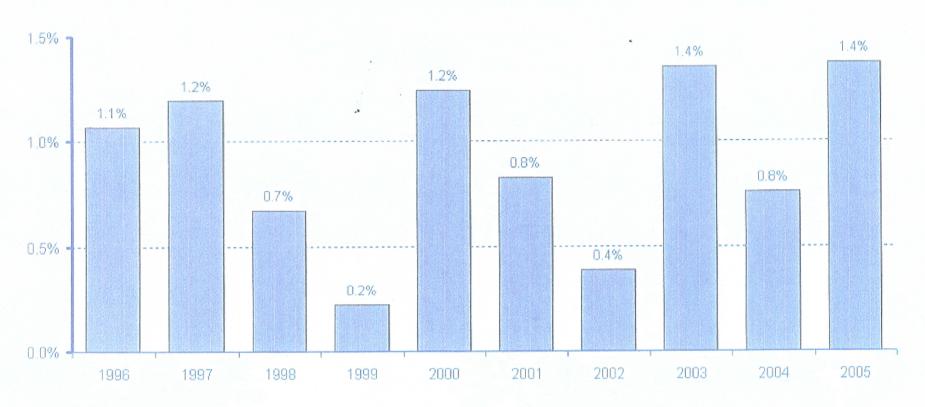
**b. 2005** Base Population Projections

# Percent Population Change City of Lubbock 1980 - 2005 0.7% Annual Average



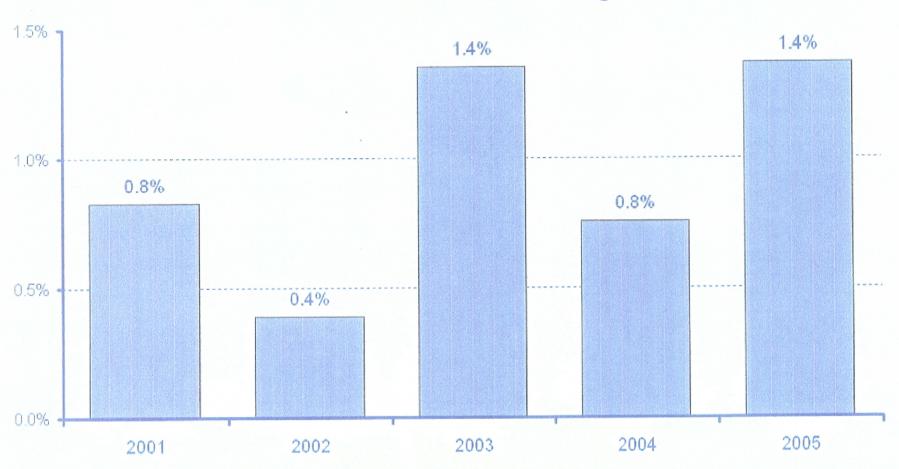
Please note that years 1985 and 2000 include 10 square mile area annexations

# Percent Population Change City of Lubbock 1996 - 2005 0.9% Annual Average

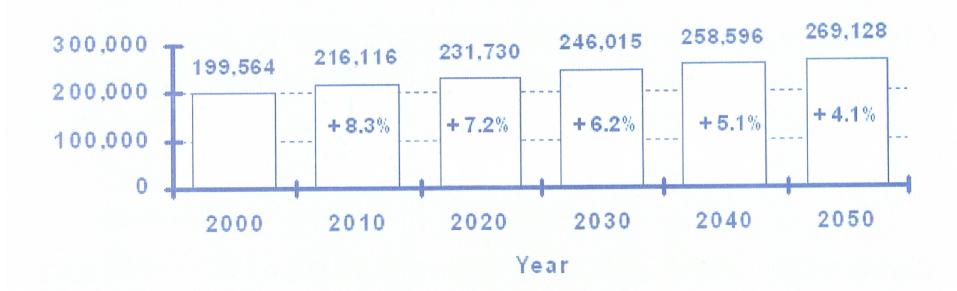


Please note that the year 2000 includes a 10 square mile area annexation

# Percent Population Change City of Lubbock 2001 - 2005 0.9% Annual Average



# City of Lubbock Projected Population 2000 - 2050



# Section 3 – Water Supply Models for the next 100 Years

c. 2005 Base for Per Capita Water Use Analysis

# LUBBOCK PER CAPITA USE STATISTICAL ANALYSIS

	ANNUAL
YEAR	AVG. GPCD
1985	185
1986	175
1987	167
1988	182
1989	194
1990	192
1991	176
1992	165
1993	179
1994	195
1995	211
1996	203
1997	184
1998	224
1999	187
2000	198
2001	191
2002	180
2003	190
2004	160
AVG.	186.90
MAX.	224.00
MIN.	160.00
STD.DEV.	15.41
SLOPE	0.46
Y-INTER	-727.87

68% of values 171.49 202.31 95% of values 156.07 217.73

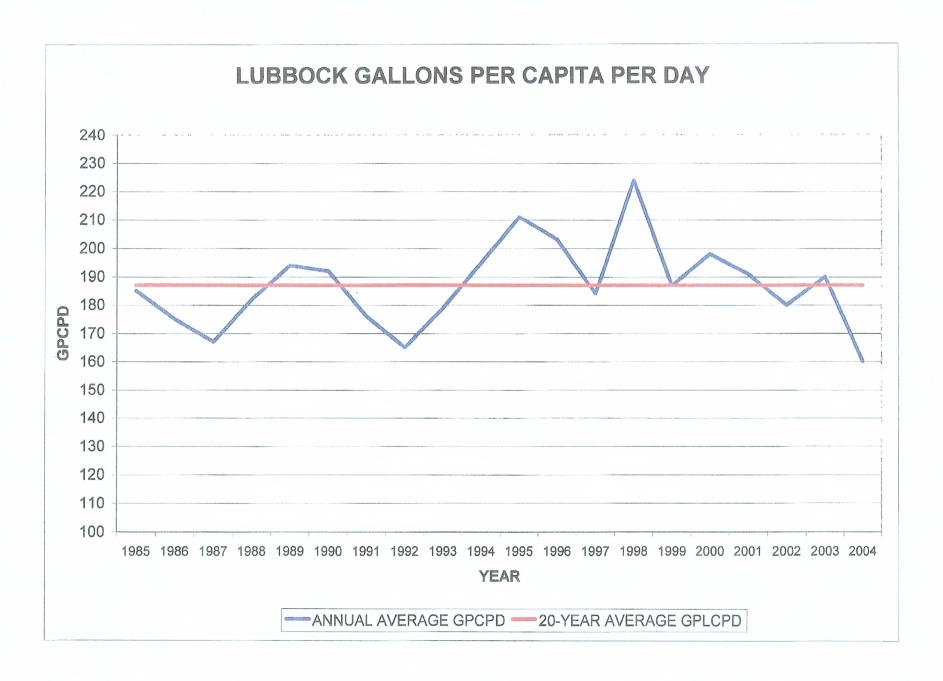
2050 212.35

# Gallons Per Day Per Capita Analysis City of Lubbock March 2005

	Annual			
	Average			
<u>Year</u>	<u>GPCPD</u>			
1985	185	160's	160	
		100 \$		
1986			165	
1987			167	
1988		170's		
1989	194		176	
1990	192		179	
1991	176	180's	180	
1992	165		182	
1993	179		184	
1994	195		185	
1995	211		187	
1996	203	190's	190	
1997	184		191	
1998	3 224		192	
1999	187		194	
2000	198		195	
2001	191		198	Target for Scenario #6, Most Likely
2002	180	200's	203	
2003	190		211	
2004	160		224	
Average	187			

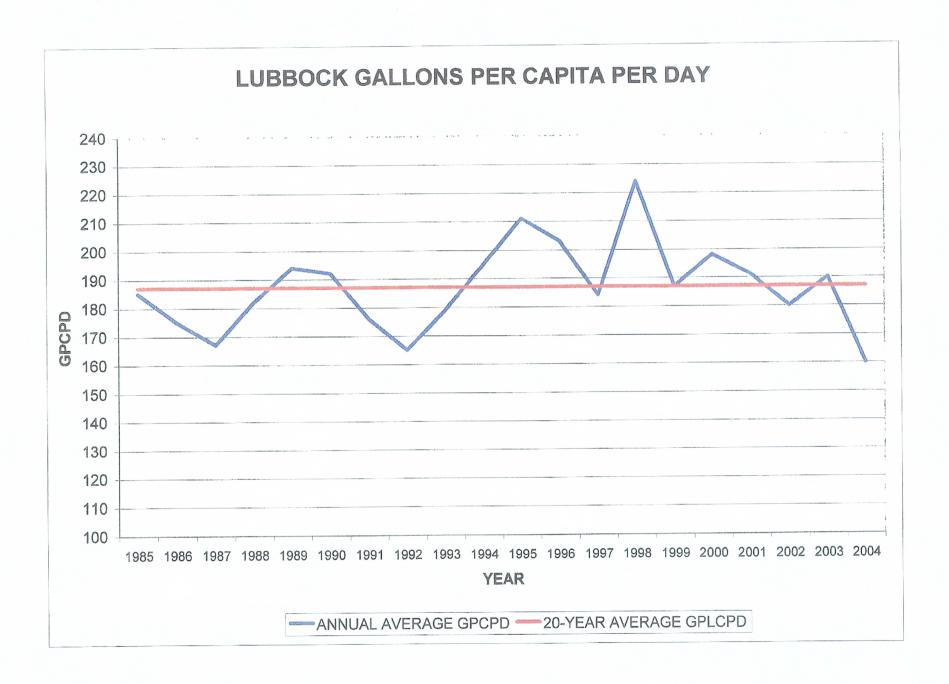
	GALLONS PER CAPITA PER DAY													
					» (C	GPCP	D)							
YEAR	ANNUAL		:				MON	THLY						
	AVERAGE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1985	185	132	139	148	210	216	203	262	282	210	143	139	134	
1986	175	143	143	177	204	234	164	255	210	161	140	133	126	
1987	167	122	124	132	176	186	194	220	255	158	160	139	134	
1988	182	131	136	155	180	201	242	230	255	178	181	157	133	
1989	194	148	146	161	218	259	210	315	227	175	172	153	141	
1990	192	143	139	140	166	216	343	288	215	218	158	138	139	
1991	176	133	140	165	219	223	202	231	206	159	169	133	125	
1992	165	122	130	143	152	178	164	230	215	195	178	143	125	
1993	179	127	121	143	172	209	253	222	241	209	174	136	134	
1994	195	135	149	168	190	166	295	305	262	202	178	148	143	
1995	211	139	152	168	210	219	257	342	290	220	192	175	158	
1996	203	146	171	189	236	275	237	239	255	207	183	151	139	
1997	184	137	131	169	154	178	198	264	270	230	184	152	140	
1998	224	141	136	145	215	304	349	374	265	274	201	147	132	
1999	187	132	145	146	194	189	197	259	276	220	177	162	138	
2000	198	137	153	159	179	269	181	252	305	288	178	134	137	
2001	191	127	129	130	180	183	272	327	271	211	190	142	125	
2002	180	126	127	144	160	220	228	240	284	220	161	131	119	
2003	190	125	129	158	200	225	192	278	295	214	182	144	129	
2004	160	122	118	125	147	204	220	228	192	186	136	117	118	
AVERAGE	187	133	138	153	188	218	230	268	254	207	172	144	133	

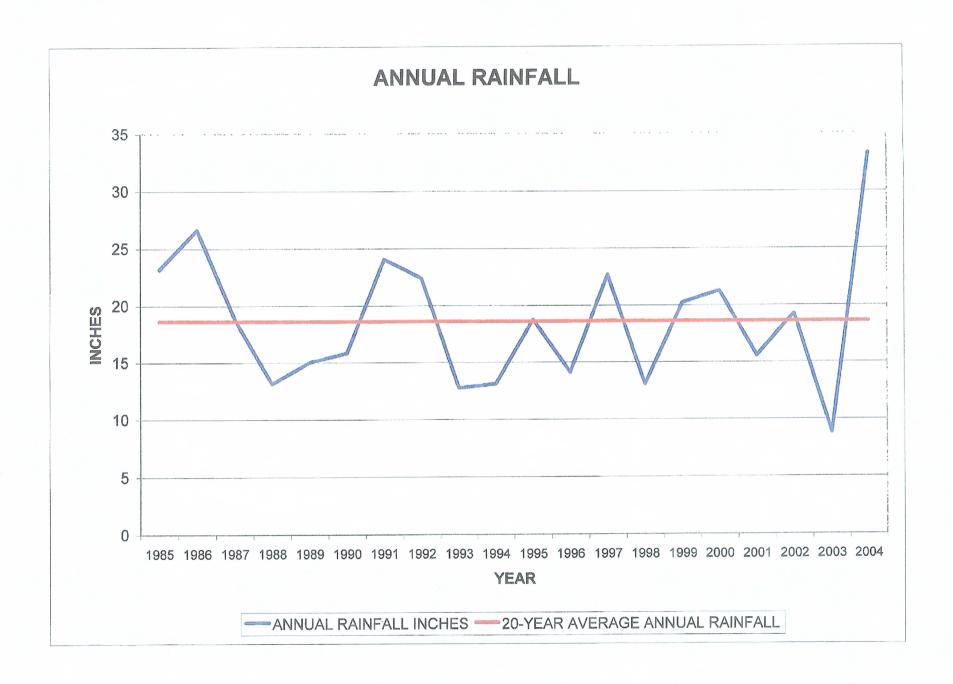
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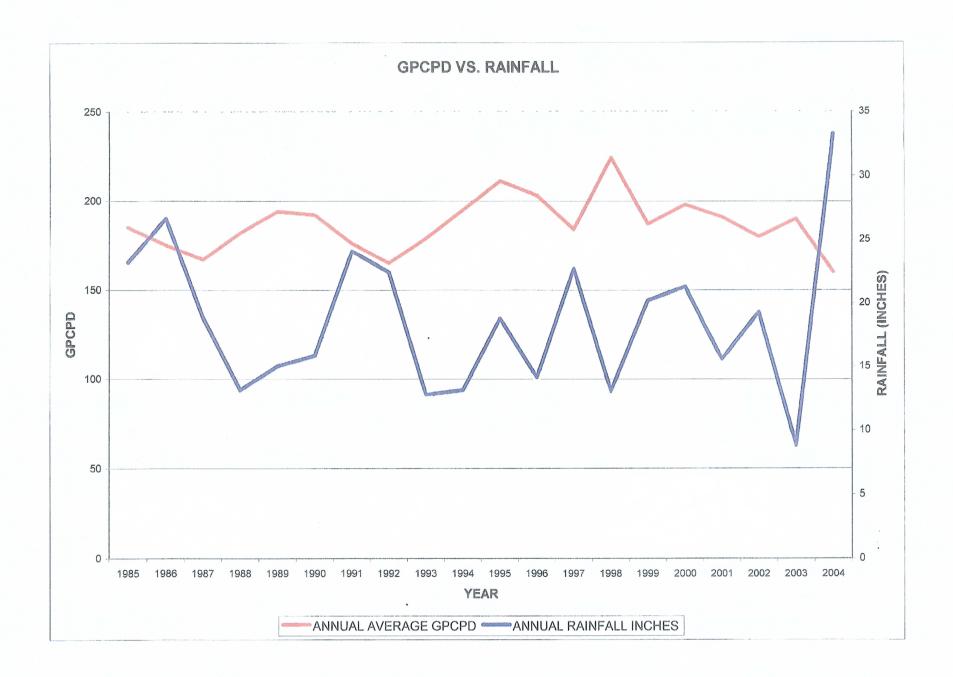


#### LUBBUCK GALLONS PER CAPITA PER DAY AND RAINFALL

	ANNUAL	ANNUAL
	AVERAGE	RAINFALL
YEAR	GPCPD	INCHES
1985	185	23.15
1986	175	26.61
1987	167	18.82
1988	182	13.12
1989	194	15.01
1990	192	15.83
1991	176	24.04
1992	165	22.39
1993	179	12.75
1994	195	13.12
1995	211	18.75
1996	203	14.12
1997	184	22.67
1998	224	13.05
1999	187	20.19
2000	198	21.27
2001	191	15.55
2002	180	19.27
2003	190	8.81
2004	160	33.25
AVERAGE	187	18.59





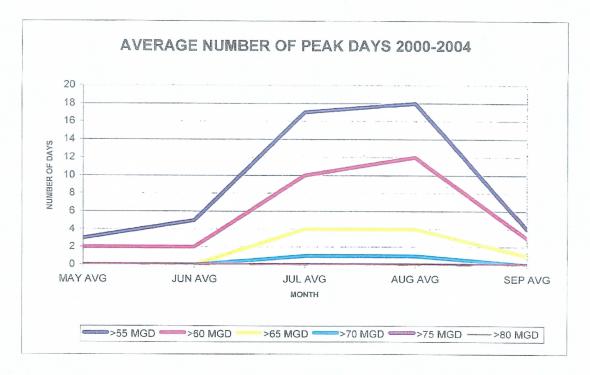


# Section 3 – Water Supply Models for the next 100 Years

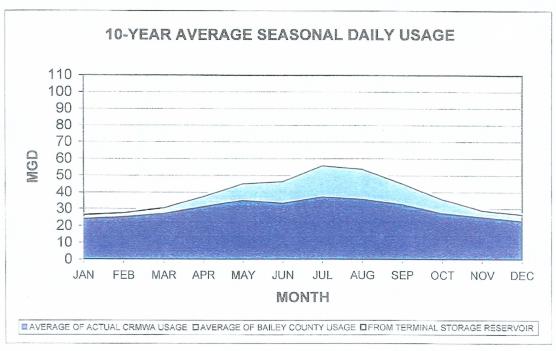
d. 2005 Base for Peak Day Use

## WATER PLANNING GRAPHICS

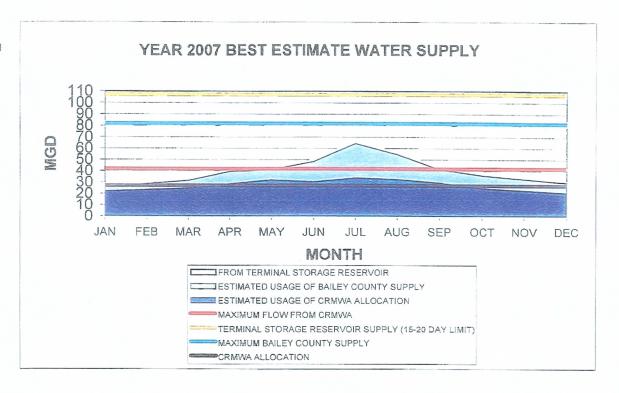
#### GRAPH NO. 1



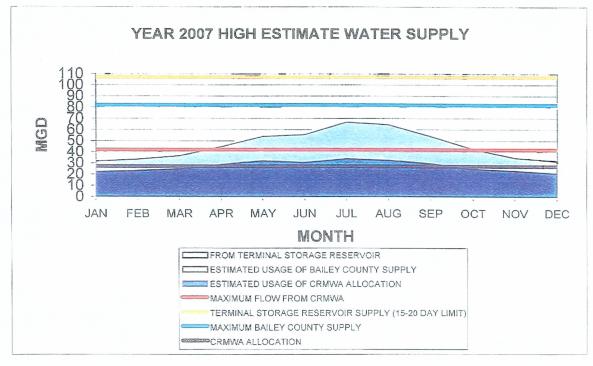
#### GRAPH NO. 2



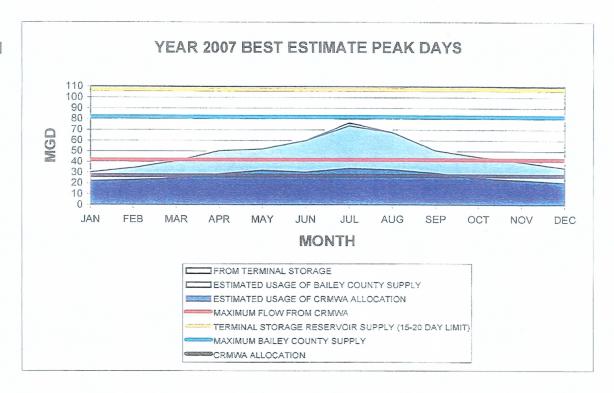
GRAPH NO. 19



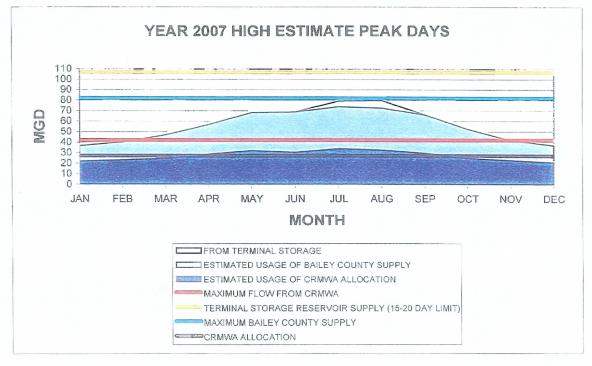
GRAPH NO. 20



GRAPH NO. 21



GRAPH NO. 22



	PEAK MILLION GALLONS PER DAY													
	(MGD)													
YEAR	ANNUAL						MON	THLY						
	PEAK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1985	65.18	27.71	27.03	31.33	49.84	52.09	51.64	58.50	65.18	55.59	34.29	30.05	30.50	
1986	65.71	31.69	31.07	41.50	46.01	55.76	42.11	65.03	65.71	33.33	30.66	27.79	24.75	
1987	57.01	25.98	26.69	29.23	40.19	46.22	52.27	52.97	57.01	34.24	33.41	27.93	28.21	
1988	60.40	26.63	30.75	35.95	43.77	52.08	58.59	58.09	60.40	40.81	37.38	36.29	28.73	
1989	69.13	32.18	33.09	40.90	49.17	64.25	56.06	68.37	69.13	42.85	37.08	32.93	30.89	
1990	79.00	33.64	32.72	34.38	40.49	53.04	74.59	79.00	54.80	53.94	36.39	31.62	29.09	
1991	67.38	30.51	30.79	44.40	49.81	53.99	53.27	67.38	60.07	42.80	36.91	27.83	28.01	
1992	55.50	26.06	30.07	36.04	42.63	42.81	42.57	55.50	51.46	42.88	40.07	31.78	33.53	
1993	58.35	30.27	32.53	36.21	41.79	52.15	56.87	56.24	58.35	46.28	41.40	33.67	38.59	
1994	74.98	31.34	33.38	39.80	47.40	44.35	74.98	67.05	63.34	45.90	44.39	34.32	31.05	
1995	79.54	29.24	37.95	49.08	52.67	55.45	65.89	79.54	71.91	66.94	40.38	39.07	34.67	
1996	66.71	31.09	38.81	46.25	57.80	66.71	44.37	41.66	65.77	30.42	45.30	33.90	30.93	
1997	63.37	35.56	33.44	42.43	40.95	42.47	52.35	62.29	63.04	63.37	43.07	35.66	31.96	
1998	84.17	32.02	30.11	36.12	52.93	76.51	82.43	84.17	76.39	61.17	51.41	33.56	28.41	
1999	68.93	31.08	34.34	35.11	49.94	52.92	48.81	68.93	64.61	59.14	43.91	38.92	31.69	
2000	67.82	32.75	36.99	37.33	45.51	64.85	46.24	61.82	67.44	67.82	52.78	29.77	36.35	
2001	73.09	28.15	29.61	35.60	45.31	47.06	67.42	73.09	70.32	51.31	42.12	41.27	28.66	
2002	63.91	28.79	30.25	34.77	41.60	52.43	59.66	63.17	63.91	54.05	42.26	31.16	27.90	
2003	73.61	29.46	33.59	40.56	49.26	58.64	52.34	66.96	73.61	49.87	44.93	36.80	30.48	
2004	59.94	28.36	27.92	36.21	39.64	53.89	56.16	59.94	49.23	48.85	33.22	29.39	27.58	
AVERAGE	67.69	30.12	32.06	38.16	46.34	54.38	56.93	64.48	63.58	49.58	40.57	33.19	30.60	

/// 210102	AVERAGE MILLION GALLONS PER DAY														
	(MGD)														
YEAR	ANNUAL		MONTHLY												
	AVERAGE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1985	33.26	23.39	24.60	26.16	36.54	37.52	35.60	45.37	49.10	36.68	25.31	24.47	23.55		
1986	31.57	25.32	25.03	30.74	35.57	40.78	29.19	44.46	36.95	28.81	25.18	23.62	22.11		
1987	30.40	22.27	22.56	24.07	32.03	33.79	35.30	39.97	46.38	28.79	29.20	25.37	24.37		
1988	33.31	23.93	24.97	28.39	32.99	36.89	44.32	42.19	46.81	32.70	33.08	28.69	24.60		
1989	35.92	27.38	26.93	29.74	40.28	47.97	38.80	58.28	42.04	32.43	31.89	28.27	26.00		
1990	36.79	26.73	25.97	26.20	31.04	40.43	64.22	53.64	40.09	40.62	29.43	25.78	25.80		
1991	32.97	24.98	26.31	30.92	41.15	41.89	37.95	43.29	38.58	29.88	31.69	25.01	23.40		
1992	31.14	23.03	24.61	27.09	28.69	33.60	31.05	43.49	40.65	36.79	33.53	26.97	23.67		
1993	34.01	24.18	23.03	27.18	32.71	39.67	48.20	42.25	45.82	39.82	33.20	25.87	25.47		
1994	37.43	25.92	28.63	32.20	36.40	31.84	56.53	58.39	50.22	38.77	34.03	28.38	27.37		
1995	40.61	26.83	29.34	32.33	40.50	42.21	49.56	65.98	55.99	42.49	36.99	33.74	30.42		
1996	39.28	28.37	33.13	36.64	45.80	53.41	45.93	46.38	49.44	40.14	35.53	29.25	27.04		
1997	36.07	26.70	25.64	33.11	30.21	34.79	38.76	51.62	52.84	44.96	36.07	29.77	27.37		
1998	44.09	27.68	26.77	28.46	42.31	59.91	68.66	73.59	52.19	53.95	39.62	28.90	25.95		
1999	36.99	26.23	28.80	28.92	38.49	37.37	38.99	51.42	54.74	43.66	35.13	32.03	27.44		
2000	39.51	27.36	30.51	31.73	35.65	53.64	36.07	50.31	60.91	57.57	35.58	26.73	27.36		
2001	38.46	25.65	25.92	26.09	36.34	36.93	54.79	65.79	54.49	42.44	38.36	28.67	25.09		
2002	36.67	25.55	25.92	29.20	32.58	44.79	46.34	48.76	57.82	44.70	32.68	26.59	24.22		
2003	38.95	25.64	26.43	32.44	40.99	46.12	39.48	57.11	60.59	43.96	37.38	29.47	26.49		
2004	33.05	25.18	24.38	25.96	30.49	42.21	45.62	47.27	39.68	38.49	28.24	24.30	24.43		
AVERAGE	36.02	25.62	26.47	29.38	36.04	41.79	44.27	51.48	48.77	39.88	33.11	27.59	25.61		