Appendix C: Correspondences

- UWMP Notice of Preparation, March 10, 2016
- Growth Projection Letter to Cities and Counties
- UWMP Public Draft Comments

Appendix C: Correspondences

- UWMP Notice of Preparation, March 10, 2016

CALIFORNIA WATER SERVICE
1720 North First Street
San Jose, CA 95112-4598 Tel: (408) 367-8200

March 10, 2016

[Name_F] [Name_L]
[Organization]
[Address]
[City], CA [ZipCode]

Dear [Title] [Name_L]:

California Water Service (Cal Water) is committed to providing safe, reliable, and high-quality water utility service in our Stockton service area. At Cal Water, one of our top priorities is ensuring that our customers have a sustainable supply of water for decades to come.

With that in mind, we wanted to take this opportunity to let you know that we are updating our Urban Water Management Plan (UWMP) for this service area. This UWMP is reviewed and updated every five years pursuant to the Urban Water Management Plan Act, and will be completed by July 1, 2016. Our UWMP is a foundational document that supports our long-term water resource planning to ensure our customers have adequate water supplies to meet current and future demands.

Proposed revisions to our 2010 UWMP will be made available for public review, and we will be holding a public hearing, during which the updates for the 2015 UWMP will be discussed. The draft 2015 UWMP and the date, time and location of the public hearing will be available on our web site in a few weeks at www.calwater.com/conservation/uwmp. A hard copy of the draft UWMP will also be available at our Stockton Customer Center located at 1505 East Sonora Street, Stockton, CA 95205.

If you have any questions about the UWMP for this service area, please contact Michael Bolzowski, Cal Water Senior Engineer, at (408) 367-8338 or e-mail Planninginfo@calwater.com.

Sincerely,

Scott Wagner
Director of Capital Planning & Water Resources

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Council Member
City of Stockton
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Stockton, CA 95205
christina.fugazi@stocktongov.com

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Council Member
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Council Member
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Scot Moody
General Manager
Stockton East Water District
1505 East Sonora Street
Stockton, CA 95205
smoody@sewd.net

Appendix C: Correspondences

- Growth Projection Letter to Cities and Counties

Blanusa, Danilo

From: Blanusa, Danilo
Sent: Monday, August 24, 2015 1:53 PM
To: 'Gordon MacKay (gordon.mackay@stocktongov.com)'
Cc: Salzano, Tom; Bolzowski, Michael R.; Keck, Jonathan; Freeman, John Jr.
Subject: Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Stockton District
Attachments: Letter to City Planning Officials - Attachmet - STK.PDF

Tracking:

Recipient	Delivery
'Gordon MacKay (gordon.mackay@stocktongov.com)'	
Salzano, Tom	Delivered: 8/24/2015 1:53 PM
Bolzowski, Michael R.	Delivered: 8/24/2015 1:53 PM
Keck, Jonathan	Delivered: 8/24/2015 1:53 PM
Freeman, John Jr.	Delivered: 8/24/2015 1:53 PM

Dear Mr. MacKay,

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The purpose of this communication is to solicit your assistance in reviewing and advising us with respect to one of the key elements of the plan, which is the development of a growth forecast for our district. This growth forecast is conducted based on growth in each customer service classification applicable to a particular district, which typically include:

- Single family residential
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E. Table of population and housing values along with multi-family residential unit density and persons per housing unit density that are employed in this forecast effort.

Please note that the 2015 data, which we need to include in our finished forecast, is not yet final, and some minor fluctuation of these values is possible.

Please examine these documents to determine if you concur with our forecasted housing and population numbers. It would be greatly appreciated if you could, by **September 11, 2015**, provide us with an indication of your support or in the case you do not agree with our forecast a reason why and the appropriate rate or growth pattern that we should employ. **If I do not hear back from you by the end of business (EOB) on the above date I will assume that you concur with our forecast.**

If you need a more detailed explanation of these numbers or want to review them with us please feel free to contact me at (408) 367-8340 or by email at tsalzano@calwater.com.

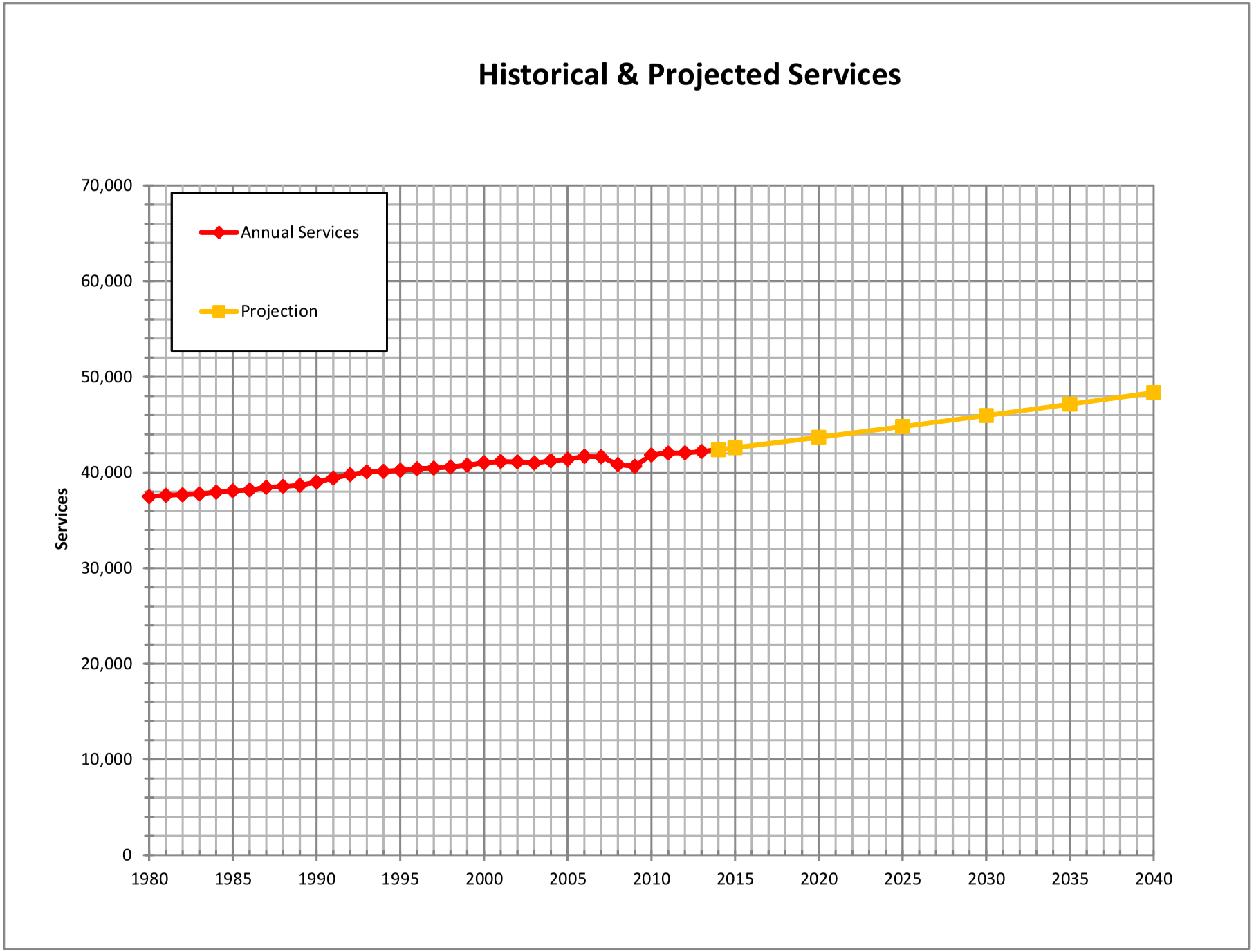
Thank you for your assistance in this effort.

Respectfully,

Thomas A. Salzano

Thomas A. Salzano
Water Resource Planning Supervisor

Danilo Blanusa, P.E.
Senior Engineer
CALIFORNIA WATER SERVICE
408-367-8387


Historical & Projected Services
Annual Services
Projection
Services
70,000
60,000
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40,000
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20,000
10,000
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California Water Service Company - Stockton District

Worksheet 8

Water Supply and Demand Analysis and Projections

Actual & Projected Annual Average Services

Customer Category		Selected Trend		Growth Rate	Actual Services				Projected Services					
					2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
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MFR		MFR_D	15 Yr. Avg.	1.43%	336	325	375	413	419	449	482	518	556	597
COM		COM_E	Overall 20 Yr. Avg.	0.51%	3,915	3,975	3,903	3,786	3,805	3,903	4,004	4,107	4,213	4,322
IND		IND_A	Zero Growth Rate	0.00%	91	86	84	83	83	83	83	83	83	83
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TOTAL		Average growth rate 2011-2040		0.51%	41,014	41,364	41,811	42,372	42,587	43,679	44,800	45,952	47,134	48,347

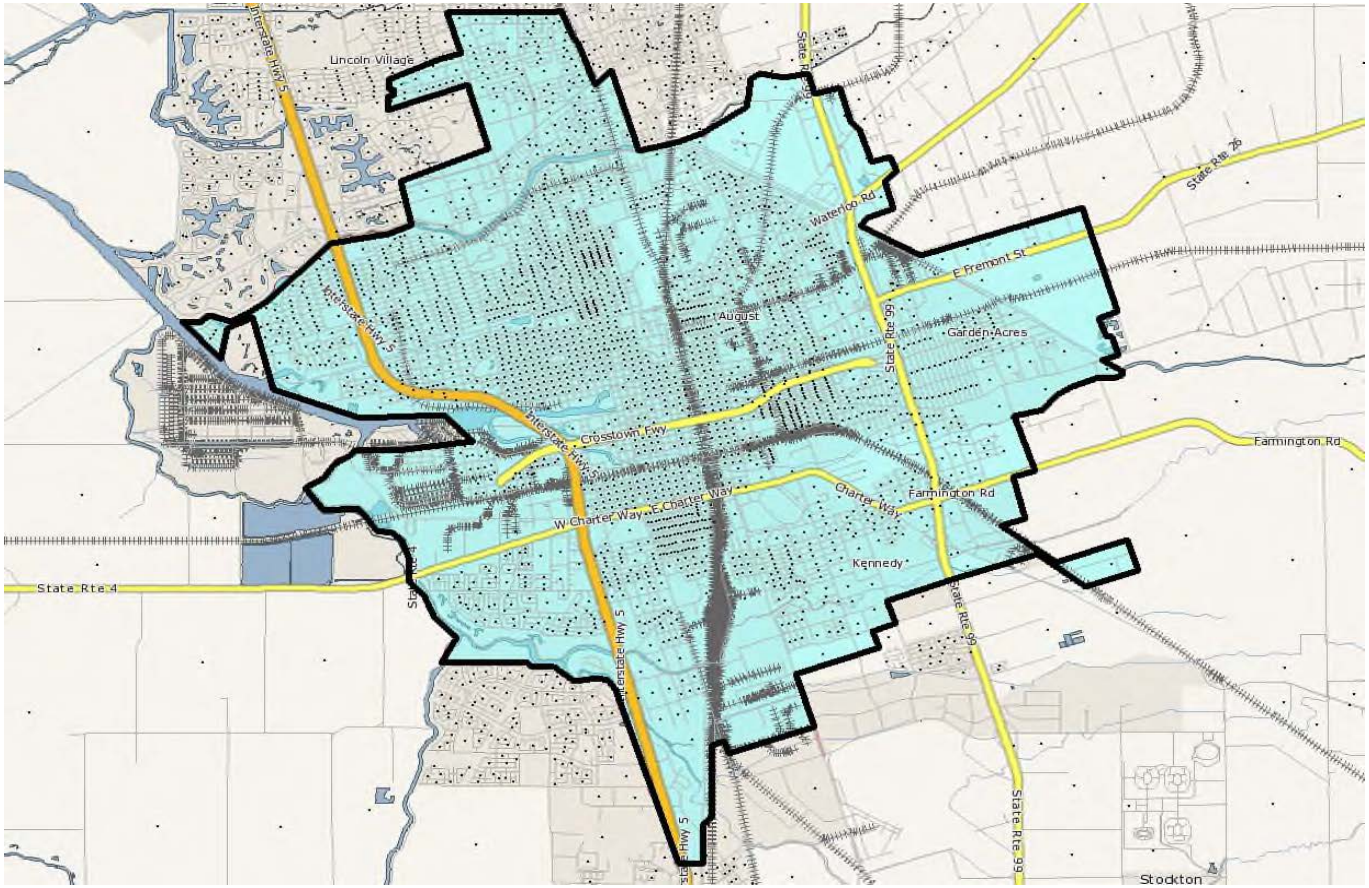
Notes:

California Water Service Company - Stockton District

Worksheet 12

Water Supply and Demand Analysis and Projections

Marplot Summary



	US Census 2000 Summary				US Census 2010 Summary				2000-2010 Change		
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Housing Projections
Total Residential Dwelling Units
US Census
CDOF
Water Supply and Facilities Master Plan
San Joaquin County Economic Forecast (DOT)
2010 UWMP
House/Service Count
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
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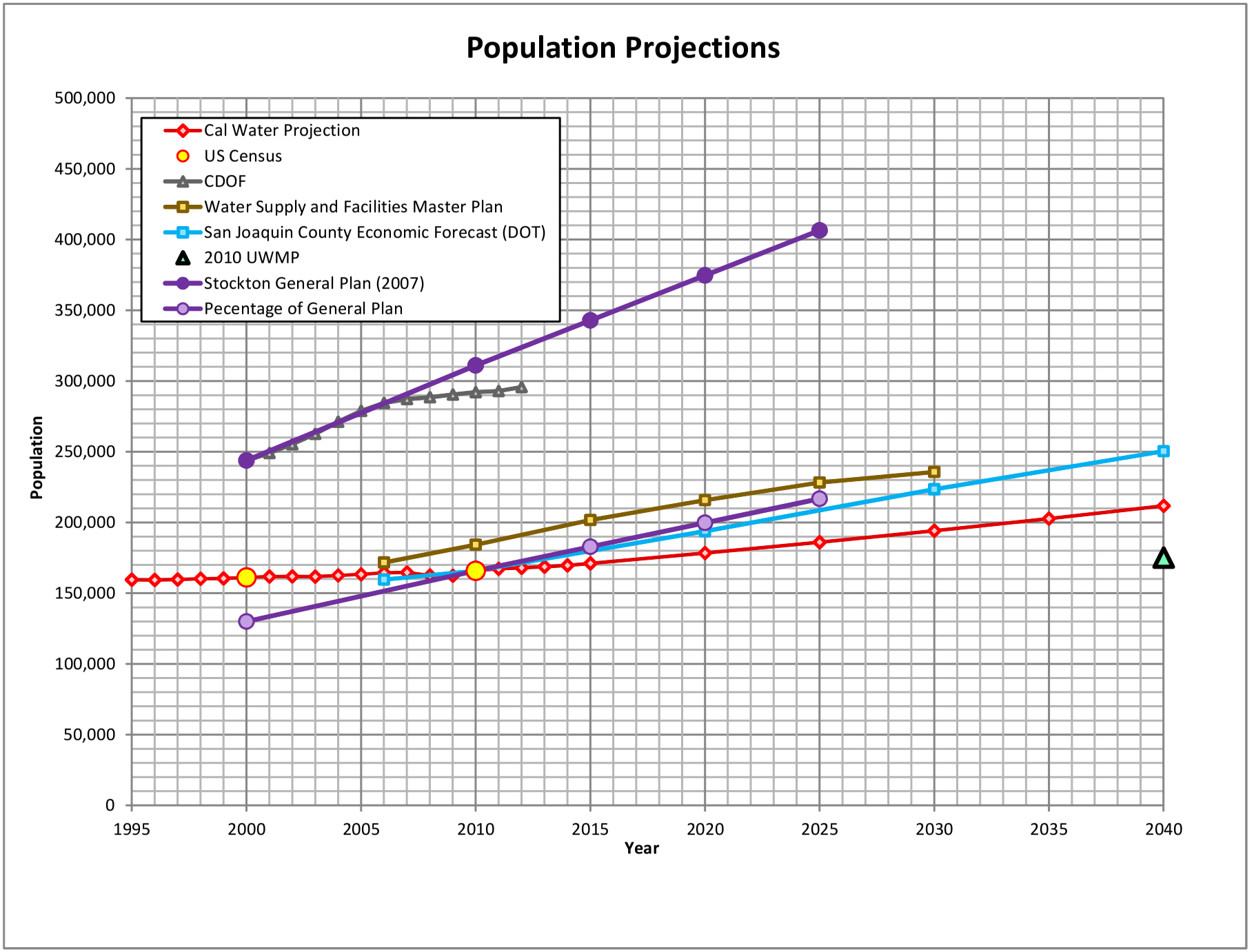
Year


Population Projections
Cal Water Projection
US Census
CDOF
Water Supply and Facilities Master Plan
San Joaquin County Economic Forecast (DOT)
2010 UWMP
Stockton General Plan (2007)
Pecentage of General Plan
Population
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California Water Service Company - Stockton District

Worksheet 12

Water Supply and Demand Analysis and Projections

Population Estimate

Year	US Census		Persons per Housing Unit	Single Family Residential	Multi Family Residential			Flat Rate Residential
	Population	Housing Units		Services (DU)	Services	Residential Units (DU)	Unit Density	Services (DU)
2000	161,153	53,911	2.989	36,341	336	17,570	52.3	0
2010	165,840	57,269	2.896	37,101	375	20,168	53.8	0
	2.9%	6.2%	-3.1%	2.1%	11.6%	14.8%	2.9%	0.0%

	Year	Single Family Residential Services (DU)	Multi Family Residential			Flat Rate Residential Services (DU)	Total Residential Dwelling Units	Persons per Housing Unit	Estimated District Population	
			Services	Residential Units (DU)	Unit Density					
	1995	35,540	341	17,810	52.3	0	53,350	2.989	159,475	
	1996	35,755	336	17,548	52.3	0	53,304	2.989	159,337	
	1997	35,837	336	17,579	52.3	0	53,416	2.989	159,672	
	1998	35,952	337	17,644	52.3	0	53,596	2.989	160,211	
	1999	36,117	336	17,566	52.3	0	53,683	2.989	160,470	
	2000	36,341	336	17,570	52.3	0	53,911	2.989	161,153	
	2001	36,463	338	17,830	52.8	0	54,293	2.980	161,787	
	2002	36,399	331	18,090	54.7	0	54,489	2.971	161,863	
	2003	36,261	327	18,349	56.2	0	54,610	2.961	161,712	
	2004	36,456	326	18,609	57.1	0	55,065	2.952	162,546	
	2005	36,634	325	18,869	58.0	0	55,503	2.943	163,319	
	2006	36,923	321	19,129	59.6	0	56,052	2.933	164,410	
	2007	36,918	319	19,389	60.7	0	56,307	2.924	164,632	
	2008	36,127	349	19,649	56.4	0	55,776	2.914	162,559	
	2009	35,954	364	19,908	54.7	0	55,863	2.905	162,290	
	2010	37,101	375	20,168	53.8	0	57,269	2.896	165,840	
	2011	37,323	404	20,428	50.5	0	57,751	2.896	167,237	
^	2012	37,361	408	20,639	50.5	0	58,000	2.896	167,956	^
|	2013	37,521	411	20,744	50.5	0	58,265	2.896	168,724	|
ACTUAL	2014	37,732	413	20,853	50.5	0	58,586	2.896	169,653	ACTUAL
PROJECTED	2015	37,921	419	21,152	50.5	0	59,073	2.896	171,063	PROJECTED
|	2020	38,878	449	22,710	50.5	0	61,588	2.896	178,347	|
V	2025	39,860	482	24,382	50.5	0	64,242	2.896	186,033	V
	2030	40,867	518	26,178	50.5	0	67,044	2.896	194,148	
	2035	41,899	556	28,106	50.5	0	70,004	2.896	202,719	
	2040	42,957	597	30,175	50.5	0	73,132	2.896	211,776	

Notes: linear extrapolation used to estimated MFR-DU from 2000. Estimate extend until 2011 due to reclassification, afterwards a constant MFR Unit Density is used.

Blanusa, Danilo

From: Blanusa, Danilo
Sent: Monday, August 24, 2015 3:45 PM
To: 'Regina Rubier (Regina.Rubier@stocktongov.com)'
Cc: Salzano, Tom; Bolzowski, Michael R.; Keck, Jonathan; Freeman, John Jr.; Cavallini, Steven T.
Subject: Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Stockton District
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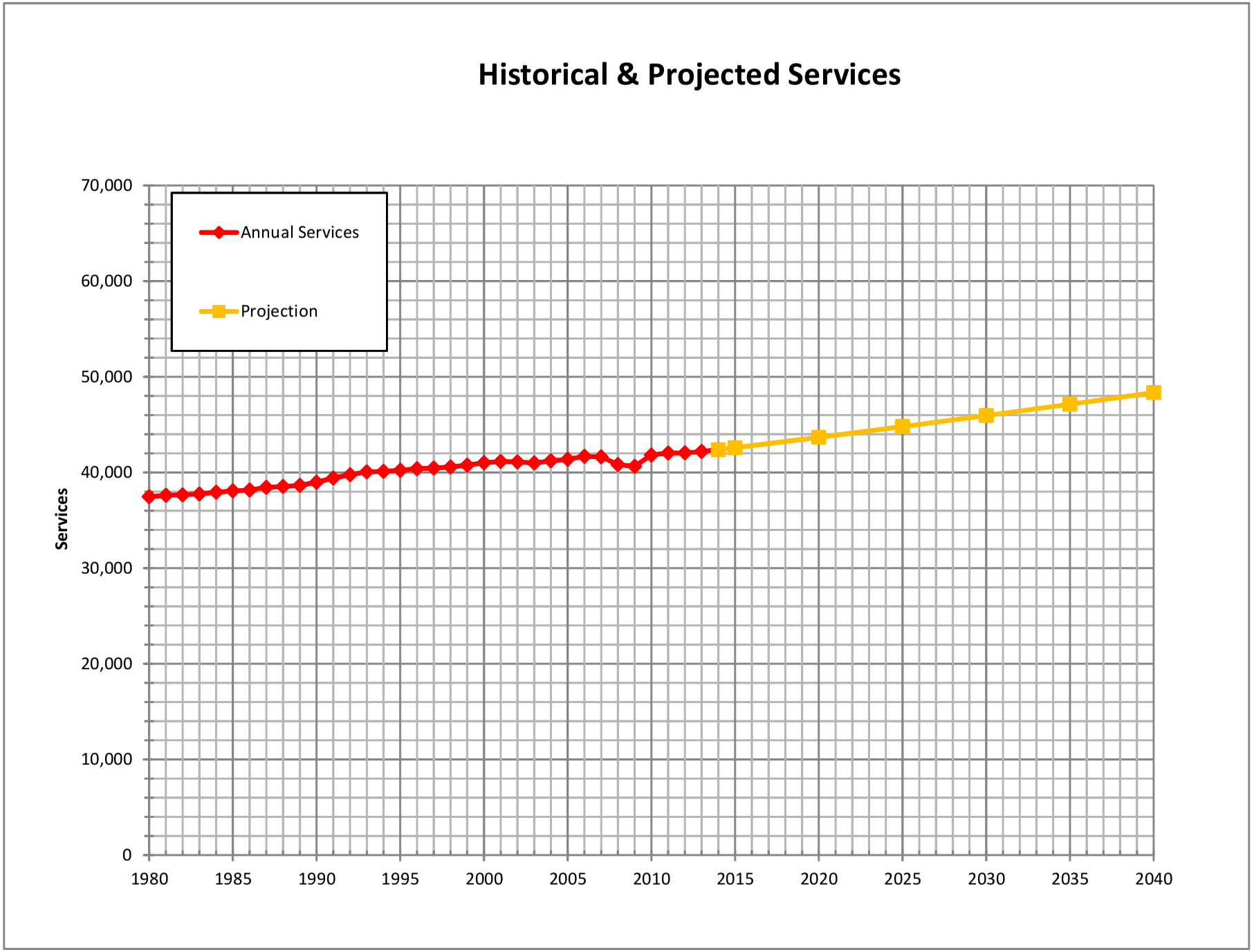
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California Water Service Company - Stockton District

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California Water Service Company - Stockton District

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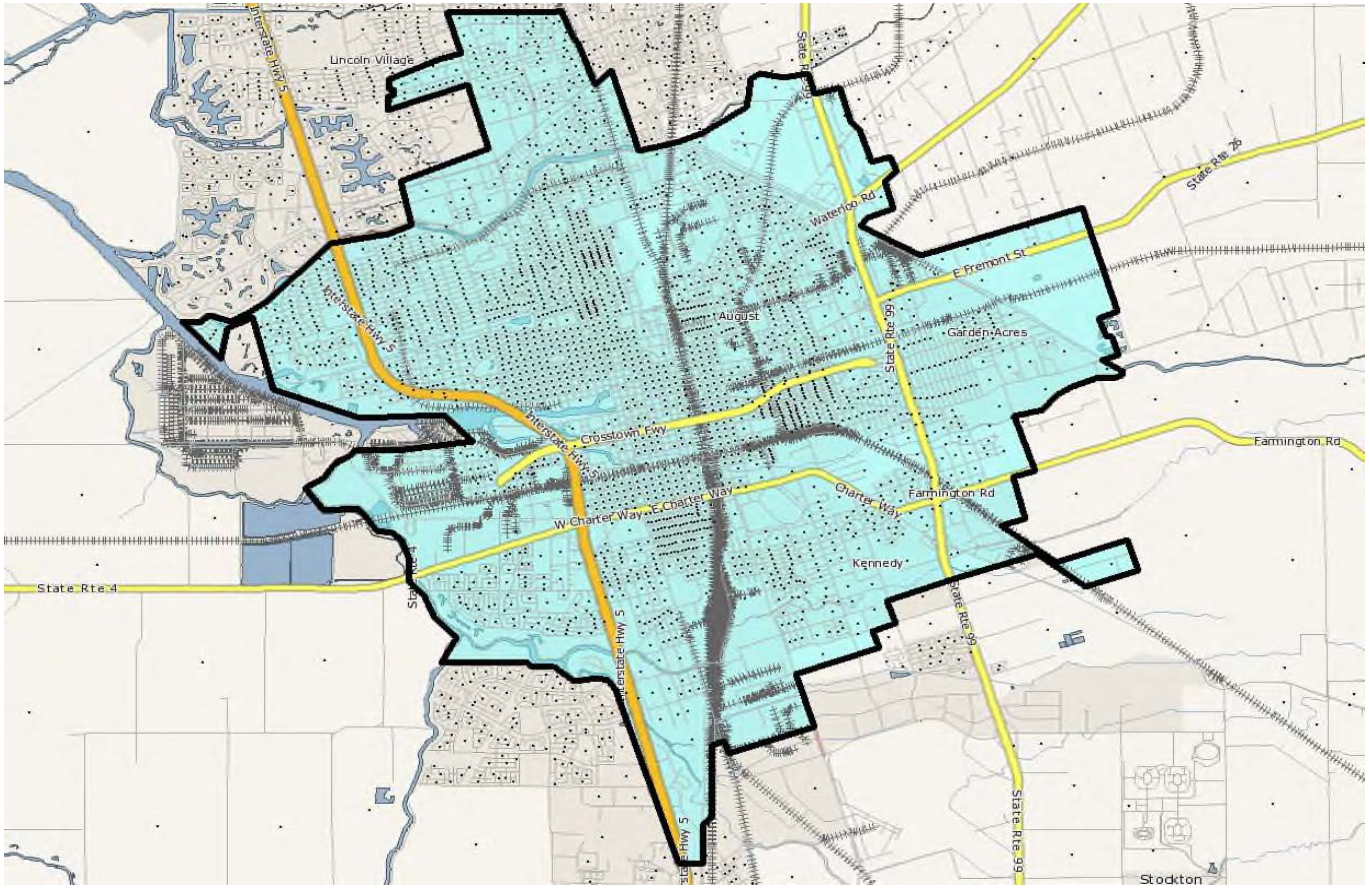

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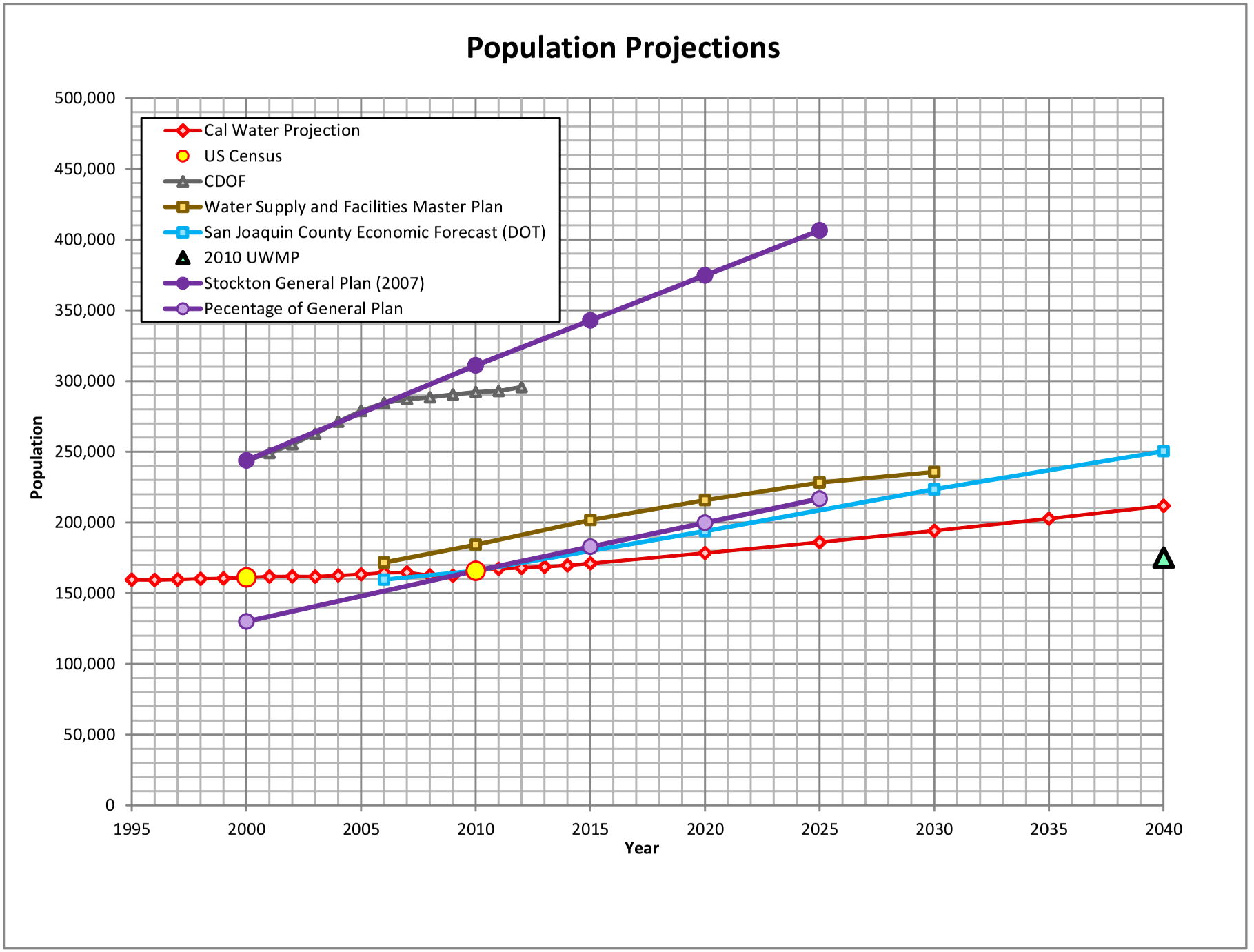
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300,000
250,000
200,000
150,000
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2000
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California Water Service Company - Stockton District

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2000	161,153	53,911	2.989	36,341	336	17,570	52.3	0
2010	165,840	57,269	2.896	37,101	375	20,168	53.8	0
	2.9%	6.2%	-3.1%	2.1%	11.6%	14.8%	2.9%	0.0%

	Year	Single Family Residential Services (DU)	Multi Family Residential			Flat Rate Residential Services (DU)	Total Residential Dwelling Units	Persons per Housing Unit	Estimated District Population	
			Services	Residential Units (DU)	Unit Density					
	1995	35,540	341	17,810	52.3	0	53,350	2.989	159,475	
	1996	35,755	336	17,548	52.3	0	53,304	2.989	159,337	
	1997	35,837	336	17,579	52.3	0	53,416	2.989	159,672	
	1998	35,952	337	17,644	52.3	0	53,596	2.989	160,211	
	1999	36,117	336	17,566	52.3	0	53,683	2.989	160,470	
	2000	36,341	336	17,570	52.3	0	53,911	2.989	161,153	
	2001	36,463	338	17,830	52.8	0	54,293	2.980	161,787	
	2002	36,399	331	18,090	54.7	0	54,489	2.971	161,863	
	2003	36,261	327	18,349	56.2	0	54,610	2.961	161,712	
	2004	36,456	326	18,609	57.1	0	55,065	2.952	162,546	
	2005	36,634	325	18,869	58.0	0	55,503	2.943	163,319	
	2006	36,923	321	19,129	59.6	0	56,052	2.933	164,410	
	2007	36,918	319	19,389	60.7	0	56,307	2.924	164,632	
	2008	36,127	349	19,649	56.4	0	55,776	2.914	162,559	
	2009	35,954	364	19,908	54.7	0	55,863	2.905	162,290	
	2010	37,101	375	20,168	53.8	0	57,269	2.896	165,840	
	2011	37,323	404	20,428	50.5	0	57,751	2.896	167,237	
^	2012	37,361	408	20,639	50.5	0	58,000	2.896	167,956	^
|	2013	37,521	411	20,744	50.5	0	58,265	2.896	168,724	|
ACTUAL	2014	37,732	413	20,853	50.5	0	58,586	2.896	169,653	ACTUAL
PROJECTED	2015	37,921	419	21,152	50.5	0	59,073	2.896	171,063	PROJECTED
|	2020	38,878	449	22,710	50.5	0	61,588	2.896	178,347	|
V	2025	39,860	482	24,382	50.5	0	64,242	2.896	186,033	V
	2030	40,867	518	26,178	50.5	0	67,044	2.896	194,148	
	2035	41,899	556	28,106	50.5	0	70,004	2.896	202,719	
	2040	42,957	597	30,175	50.5	0	73,132	2.896	211,776	

Notes: linear extrapolation used to estimated MFR-DU from 2000. Estimate extend until 2011 due to reclassification, afterwards a constant MFR Unit Density is used.

Blanusa, Danilo

From: Regina Rubier <Regina.Rubier@stocktongov.com>
Sent: Tuesday, September 08, 2015 9:57 AM
To: Salzano, Tom
Cc: Blanusa, Danilo; Bolzowski, Michael R.; Cavallini, Steven T.; Freeman, John Jr.; Keck, Jonathan
Subject: RE: Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Stockton District

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Blue Category

Tom,

Thank you very much, I think these numbers look much more reasonable. Melanie Holton from Brown and Caldwell will be in contact with you shortly (yes, the same person and firm that is also completing Stockton East's UWMP) in respect to our plan. Please let me know if you need anything further.

>>> "Salzano, Tom" <TSalzano@calwater.com> 9/4/2015 3:20 PM >>>
Regina,
I want to thank you again for your input to our UWMP process associated with setting a growth rate for our Stockton District service area. Your position with the City and prior experience with Cal Water does provide a valuable perspective.

In response to your expressed concern that our growth rates were too aggressive, I reconsidered the data. Based on the information you provided I reduced our growth rate for single family residential units from 0.50% per year to 0.30% per year. This growth rate is consistent with our 10 year, 15 year and 20 year historical growth rates. However, with respects to the multi-family service growth rate and given the infill and redevelopment approach noted in the articles, I kept the growth rate for this customer class at the 1.4% per year level. This resulted in a total housing value that is more in line with our Water Supply and Facility Master Plan forecast, just delayed a few years for the past economic downturn.

Unfortunately this adjustment did not alter our population forecast very much. And, when I looked at that factor I really saw the aggressive nature of the forecast you were referring to. According to census data our population grew between 2000 and 2010 by just 4,700 people giving us a 2010 population of 165,840, but our forecast was showing population increases in the next three decades of 11,200 to 15,050 people each decade, which generated a 2040 population of over 205,400. That does seem to be too aggressive. The only thing left for us to adjust is the future density of persons per residential dwelling unit, which we have reduced slowly at the same pace as we experienced between 2000 and 2010. We are now forecasting a population for 2040 of about 187,700, with growth in each decade of 6,600 to 8,100. This seem more reasonable to me.

I wanted to share these adjustments with you and get any response you may have. I have attached a new set of table and charts for you to review.

Thanks again for all your assistance with this, it truly has been a great help.

Tom

Thomas A. Salzano
Water Resource Planning Supervisor
California Water Service
1720 North First Street, San Jose, CA 95112-4598
(408) 367-8340
tsalzano@calwater.com

From: Regina Rubier [mailto:Regina.Rubier@stocktongov.com]
Sent: Wednesday, September 02, 2015 10:38 AM
To: Blanusa, Danilo
Cc: Bolzowski, Michael R.; Cavallini, Steven T.; Freeman, John Jr.; Keck, Jonathan; Salzano, Tom
Subject: Re: Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Stockton District

Tom,

It was nice speaking with you this morning regarding the CalWater UWMP. As I previously mentioned, I am a bit concerned about the long term growth rate you have planned for the district. There was a court case against the City, back in 2008 and thus the City must revise the current General Plan, which I believe is part of what you based your growth rate on. The new General Plan is looking for more in-fill and less urban sprawl; however it is not yet adopted. I have attached a couple of news articles by Roger Phillips of the Stockton Record explaining this. Mr. Phillips does a fair job of reporting the facts. If you have any further questions or would like to discuss more, I have attached my contact information as well. Thank you!

http://www.recordnet.com/article/20150826/NEWS/150829713

http://www.recordnet.com/article/20150608/NEWS/150609678

Regina Rubier
Water Resources Program Manager III
Delta Water Supply Treatment Plant
City of Stockton
11373 N Lower Sacramento Rd
Lodi, CA 95242

Phone: (209)937-8782

>>> "Blanusa, Danilo" <dblanusa@calwater.com> 8/24/2015 3:44 PM >>>
Dear Ms. Rubier,

Pursuant to California Water Code, Division 6, Part 2.6, Sections 10610 through 10656, California Water Service is in the process of preparing the required 2015 update of our Urban Water Management Plans. These plans are required to be updated every five (5) years for each of our services areas (Districts). As you know our Stockton District provides water service to the City of Stockton.

The purpose of this communication is to solicit your assistance in reviewing and advising us with respect to one of the key elements of the plan, which is the development of a growth forecast for our district. This growth forecast is conducted based on growth in each customer service classification applicable to a particular district, which typically include:

- Single family residential
- Multi-family residential

- Commercial
- Industrial
- Government (City or County parks, median strips, landscaping and schools)
- Dedicated Irrigation (rare)
- Other (temporary construction meters)

The forecasted growth rates are combined with a demand per service factor applicable to each customer class to determine the future water demands for the district. These growth factors are adjustable and we want to review them with you so that we are consistent with anticipated growth that your planning efforts forecast. If adjustments are necessary we can do them now and avoid conflicts and confusion later in this process.

Some specific information regarding our approach to forecasting customer service growth is detailed as follows:

- **Residential** – Typically two residential customer service categories represent the vast majority of the service counts as well as subsequent water sales or demand in our districts. Cal Water considers both single family and multi-family residential services independently as individual classes, but combines them together in order to assess population growth and housing unit growth. While we use historical trends in the establishment for the growth rates for these two customer classes, we also analyze census data for population and housing factors and compare our forecast results for these two parameters with available data from City General Plans, as well as County Economic Forecast data and Regional government association forecasts as a reality or appropriateness check of our results.

- **Commercial & Industrial** – Historical trend is a key influence in this customer class, however where we have seen negative trends in recent years for these categories due to the economic downturn, we typically employ either a zero rate of growth or a small, reasonable positive rate of growth. We have also undertaken during the last ten years some reassessment of customer service classifications that has resulted in reallocation of some customer service accounts between various classes. This reallocation, which included commercial, industrial, multi-family residential and in some cases government services, has made the analysis of growth a bit more difficult.

- **Government** – Growth trends are generally parallel to that of the residential sector, so we verify that our rate of grow is not dramatically out-of-sequence with the overall community.

- **Other** – The use of temporary-assigned construction meters varies considerably from year to year, and can represent considerable water demand. In this case, we select a growth rate that is stable, yet reflects the overall growth of the community.

We have included with this communication a set of tables and graphs (see attachment) that illustrate the parameters that influence the growth forecast as currently set up for this district. These include:

A. The historical and projected service data in both graph and table form
B. The 2000 and 2010 Census data for the districts service area
C. Housing projection chart comparing Cal Water's forecast (always in red) with those from other organizations
D. Population projection chart comparing Cal Water's forecast (always in red) with those from other organizations
E. Table of population and housing values along with multi-family residential unit density and persons per housing unit density that are employed in this forecast effort.

Please note that the 2015 data, which we need to include in our finished forecast, is not yet final, and some minor fluctuation of these values is possible.

Please examine these documents to determine if you concur with our forecasted housing and population numbers. It would be greatly appreciated if you could, by **September 11, 2015**, provide us with an indication of your support or in the case you do not agree with our forecast a reason why and the appropriate rate or growth pattern that we should employ. **If I do not hear back from you by the end of business (EOB) on the above date I will assume that you concur with our forecast.**

If you need a more detailed explanation of these numbers or want to review them with us please feel free to contact me at (408) 367-8340 or by email at tsalzano@calwater.com.

Thank you for your assistance in this effort.

Respectfully,

Thomas A. Salzano

Thomas A. Salzano
Water Resource Planning Supervisor

Danilo Blanusa, P.E.
Senior Engineer
CALIFORNIA WATER SERVICE
408-367-8387

Quality. Service. Value.
calwater.com

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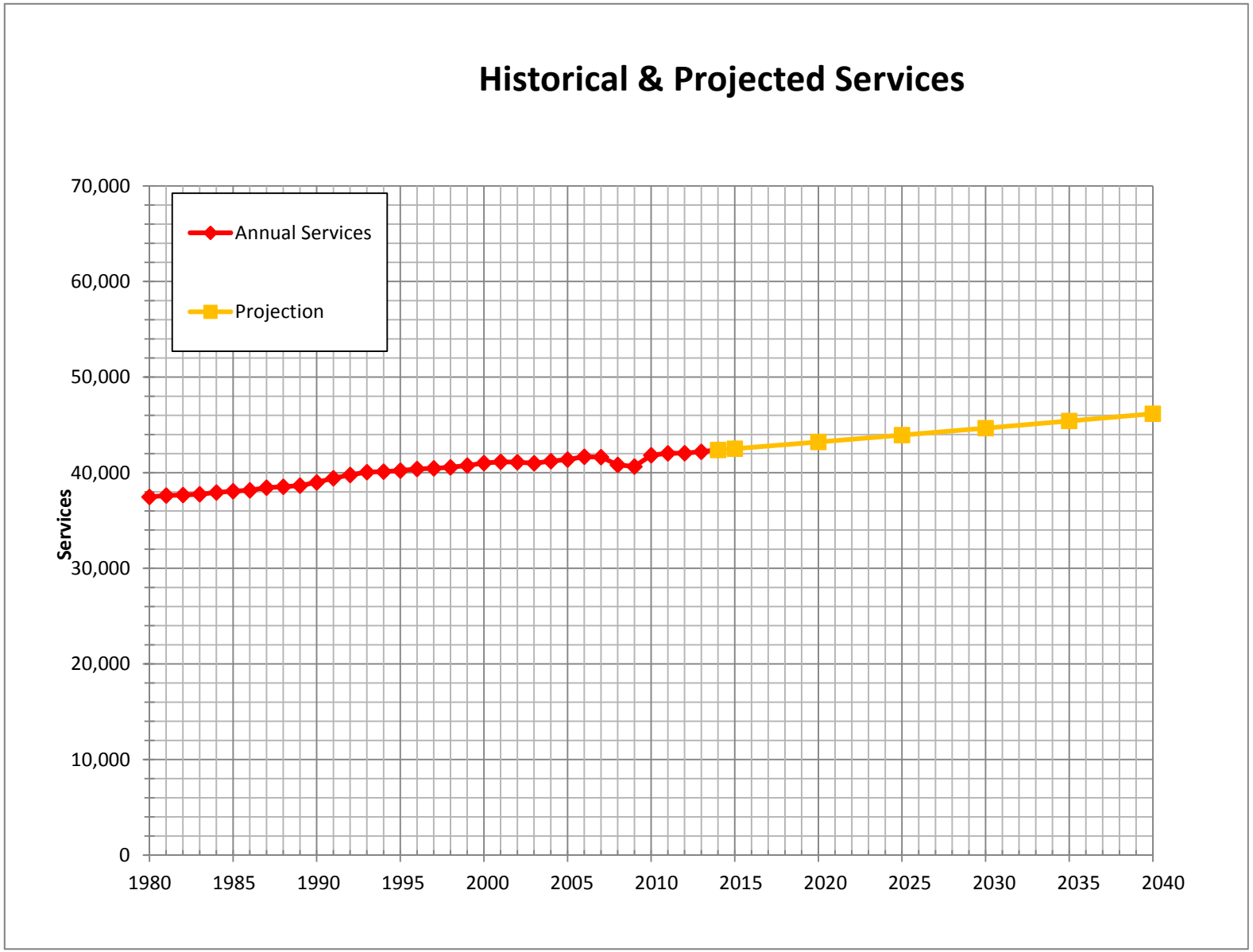

Historical & Projected Services
Annual Services
Projection
Services
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040

California Water Service Company - Stockton District

Worksheet 8

Water Supply and Demand Analysis and Projections

Actual & Projected Annual Average Services

Customer Category		Selected Trend		Growth Rate	Actual Services				Projected Services					
					2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
SFR		SFR_D	15 Yr. Avg.	0.30%	36,341	36,634	37,101	37,732	37,845	38,413	38,990	39,576	40,171	40,774
MFR		MFR_D	15 Yr. Avg.	1.43%	336	325	375	413	419	449	482	518	556	597
COM		COM_E	Overall 20 Yr. Avg.	0.51%	3,915	3,975	3,903	3,786	3,805	3,903	4,004	4,107	4,213	4,322
IND		IND_A	Zero Growth Rate	0.00%	91	86	84	83	83	83	83	83	83	83
GOV		GOV_C	10 Yr. Avg.	0.31%	305	308	325	321	321	326	332	337	342	347
OTH		OTH_C	10 Yr. Avg.	0.33%	27	36	23	38	38	39	40	40	41	42
TOTAL		Average growth rate 2011-2040		0.33%	41,014	41,364	41,811	42,372	42,511	43,214	43,931	44,661	45,406	46,165

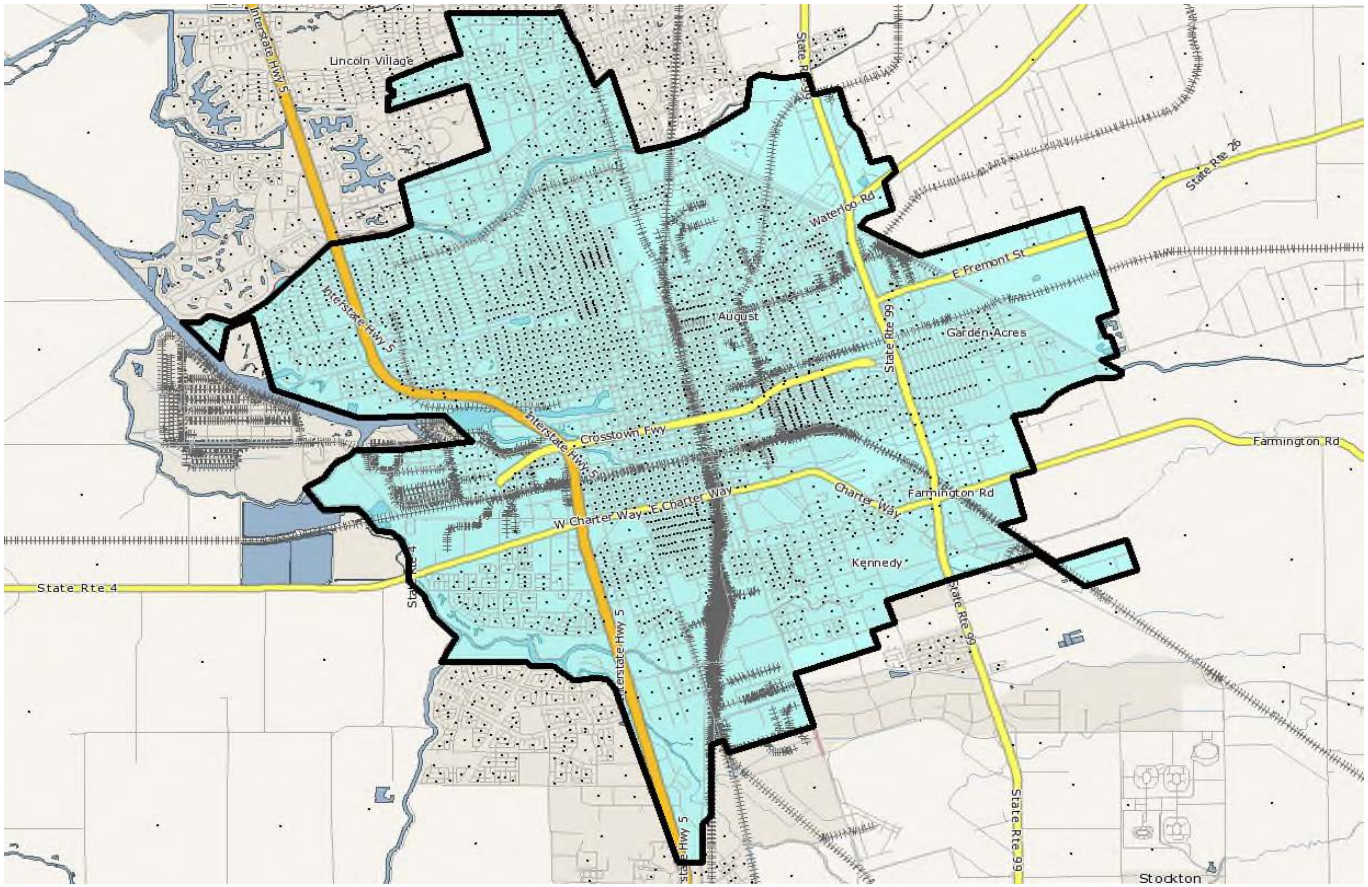
Notes:

California Water Service Company - Stockton District

Worksheet 12

Water Supply and Demand Analysis and Projections

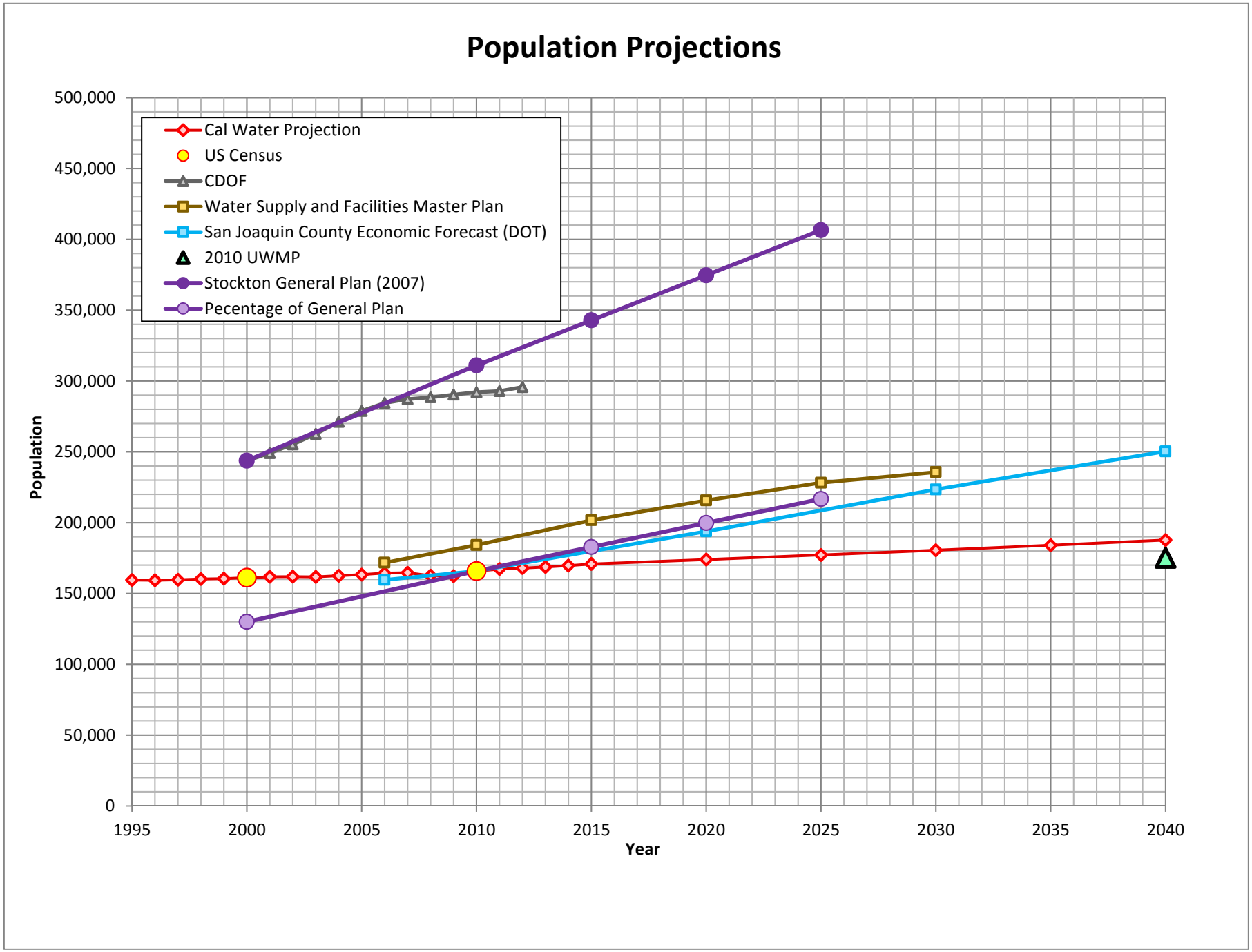
Marplot Summary



	US Census 2000 Summary				US Census 2010 Summary				2000-2010 Change		
	Census Blocks	Population	Housing Units (HU)	Density	Census Blocks	Population	Housing Units (HU)	Density	Percentage Population Change	Percentage HU Change	Density Change
Stockton	2,104	161,153	53,911	2.99	2,206	165,840	57,269	2.90	102.9%	106.2%	96.9%
	2,104	161,153	53,911	2.99	2,206	165,840	57,269	2.90	102.9%	106.2%	96.9%

MARPLOT disclaimer: The population and housing number given above are only rough estimates. They are based on the US Census Blocks. Although Census Blocks are polygons, MARPLOT uses the centoid, or center point, rather than the entire polygon. If a Census Block centroid is within any of the MARPLOT selected objects, the population and housing numbers for that block are tallied, even if only part of the block is within the selected object. It is possible for a block not be counted if its centroid is not within selected objects, even thought part of the block is within the selected objects.


Housing Projections
Total Residential Dwelling Units
US Census
CDOF
Water Supply and Facilities Master Plan
San Joaquin County Economic Forecast (DOT)
2010 UWMP
House/Service Count
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040
Year


Population Projections
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
Population
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040
Year
Cal Water Projection
US Census
CDOF
Water Supply and Facilities Master Plan
San Joaquin County Economic Forecast (DOT)
2010 UWMP
Stockton General Plan (2007)
Pecentage of General Plan

Attachment E

California Water Service Company - Stockton District

Worksheet 12

Water Supply and Demand Analysis and Projections

Population Estimate

Year	US Census		Persons per Housing Unit	Single Family	Multi Family Residential			Flat Rate
				Residential		Residential	Unit	Residential
	Population	Housing Units		Services (DU)	Services	Units (DU)	Density	Services (DU)
2000	161,153	53,911	2.989	36,341	336	17,570	52.3	0
2010	165,840	57,269	2.896	37,101	375	20,168	53.8	0
	2.9%	6.2%	-3.1%	2.1%	11.6%	14.8%	2.9%	0.0%

	Year	Single Family Residential Services (DU)	Multi Family Residential			Flat Rate Residential Services (DU)	Total Residential Dwelling Units	Persons per Housing Unit	Estimated District Population	
			Services	Residential Units (DU)	Unit Density					
	1995	35,540	341	17,810	52.3	0	53,350	2.989	159,475	
	1996	35,755	336	17,548	52.3	0	53,304	2.989	159,337	
	1997	35,837	336	17,579	52.3	0	53,416	2.989	159,672	
	1998	35,952	337	17,644	52.3	0	53,596	2.989	160,211	
	1999	36,117	336	17,566	52.3	0	53,683	2.989	160,470	
	2000	36,341	336	17,570	52.3	0	53,911	2.989	161,153	
	2001	36,463	338	17,830	52.8	0	54,293	2.980	161,787	
	2002	36,399	331	18,090	54.7	0	54,489	2.971	161,863	
	2003	36,261	327	18,349	56.2	0	54,610	2.961	161,712	
	2004	36,456	326	18,609	57.1	0	55,065	2.952	162,546	
	2005	36,634	325	18,869	58.0	0	55,503	2.943	163,319	
	2006	36,923	321	19,129	59.6	0	56,052	2.933	164,410	
	2007	36,918	319	19,389	60.7	0	56,307	2.924	164,632	
	2008	36,127	349	19,649	56.4	0	55,776	2.914	162,559	
	2009	35,954	364	19,908	54.7	0	55,863	2.905	162,290	
	2010	37,101	375	20,168	53.8	0	57,269	2.896	165,840	
	2011	37,323	404	20,428	50.5	0	57,751	2.896	167,237	
/\	2012	37,361	408	20,639	50.5	0	58,000	2.896	167,956	/\
|	2013	37,521	411	20,744	50.5	0	58,265	2.896	168,724	|
ACTUAL	2014	37,732	413	20,853	50.5	0	58,586	2.896	169,653	ACTUAL
PROJECTED	2015	37,845	419	21,152	50.5	0	58,997	2.896	170,843	PROJECTED
|	2020	38,413	449	22,710	50.5	0	61,123	2.846	173,945	|
\/	2025	38,990	482	24,382	50.5	0	63,373	2.796	177,178	\/
	2030	39,576	518	26,178	50.5	0	65,754	2.746	180,548	
	2035	40,171	556	28,106	50.5	0	68,276	2.696	184,060	
	2040	40,774	597	30,175	50.5	0	70,950	2.646	187,719	

Notes: linear extrapolation used to estimated MFR-DU from 2000. Estimate extend until 2011 due to reclassification, afterwards a constant MFR Unit Density is used.

Blanusa, Danilo

From: Salzano, Tom
Sent: Wednesday, September 16, 2015 2:58 PM
To: Gordon MacKay; Rubier, Regina
Cc: Freeman, John Jr.; Keck, Jonathan; Bolzowski, Michael R.; Blanusa, Danilo
Subject: RE: Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Stockton District
Attachments: Letter to City Planning Officials - Attachment 3 - STK.pdf

Gordon,
I want to thank you for your comments on our growth forecasts that were prepared for the 2015 update of our Stockton Urban Water Management Plan. Regina Rubier had provided comments earlier expressing a similar concern that our growth rates were too aggressive for the current conditions in the City of Stockton. I had made some adjustments based on her comments to reduce the growth rate in single family homes from 0.5% per year to 0.3%, which lowered the forecasted increase in SFR dwelling units for the period 2015 to 2020 (and similarly in each future five year period) from 957 to 569. I did not make any changes to the MFR services or dwelling units knowing that redevelopment of our service area would shift growth to more, higher density multi-family facilities. T lower population further I reduced the population density in each dwelling unit to forecast a more moderate population increase to 187,720 people in 2014 instead of our prior projected population of 211,776. The single family adjustment alone did not impact population that significantly. Unfortunately I forgot to send those changes to you for your consideration.

Based on your comments and my current review of the SB610 Water Supply Assessment for the Open Window Project (OWP) Plan, I have further considered our forecasted MFR growth rate. I have reduced the rate from 1.43% to 0.99% per year. This rate lowers the forecasted increase in MFR dwelling units for 2015 to 2020 (and similarly in each future five year period) to 1,064 rather than the 1,515 prior forecast. This puts our total dwelling unit increase at about 1,630 to 1,900 each five year period. This should reasonably cover the planned development of 1,400 MFR dwelling units from OWP since that project will apparently continue beyond 2020. And, it is more in line with the past growth conditions for total dwelling units that you point out.

However, this second modification caused population to drop even further, to the point where the forecasted population increase was equal to the number of dwelling units being forecasted. This didn't seem reasonable, so I slowed the dwelling unit density decrease in order to keep the projected population in 2040 at the 187,636 level, similar to what I got after the first set of revisions. This puts the population increase for the Cal Water service area at 3,200 to 3,600 for each five year segment of the planning horizon.

I hope you and Regina find these adjustments reasonable. I have attached these revised growth forecasts. Please let me know if you have further comments. I really do appreciate the time you took to review and provide comments on this planning effort. I do believe that it will make the plan better.

Thanks again,
Tom

Thomas A. Salzano
Water Resource Planning Supervisor
California Water Service
1720 North First Street, San Jose, CA 95112-4598

(408) 367-8340
tsalzano@calwater.com

From: Gordon MacKay [mailto:Gordon.MacKay@stocktongov.com]
Sent: Friday, September 11, 2015 1:30 PM
To: Blanusa, Danilo
Cc: Freeman, John Jr.; Keck, Jonathan; Bolzowski, Michael R.; Salzano, Tom
Subject: Re: Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Stockton District

Thank you for your email. Comments from the City of Stockton Community Development Department are as follows:

> Attachment D - Growth assumptions from our 2007 GP are clearly no longer valid and therefore should not be used for water service planning in the 2015 UWMP. The CalWater projection looks the most reasonable given that it is the lowest. The Open Window Project and other housing/multifamily projects in the Downtown could increase population in the CW service area by the equivalent of a few hundred units worth by 2020.
>
> Attachment E: Worksheet 12 - Total Residential Dwelling Units projections from 2015-2020 show growth of 59,073 to 61,588 or 2,515 D/Us. This represents as much growth that occurred from the 2003 to 2014 time period. I question that this much growth will occur in the CalWater service area in the next five years as it may not happen in the City as a whole.
>
> Attachment A: Worksheet 8 - The 2015-2020 Projected Services 38,340 to 39,327 for SFR and MFR look more reasonable (an increase of 987 service connections) but it still may be higher than actually realized in the CalWater service area. Over estimating may be good if CalWater wants to make sure that it has enough capacity to serve in the 2015-2020 time period.
>
> Attachment B: Worksheet 12 - For projection purposes the actual 2000-2010 Change may not be a good indicator as this includes the 2000 to 2007 time frame in which Stockton experienced much higher that normal population growth. Growth since 2008 to current has been at a considerably slower rate.

Thanks for the opportunity to comment.

Gordon MacKay
Director of Public Works
City of Stockton, California
209-937-8400
>>> "Blanusa, Danilo" <dblanusa@calwater.com> 8/24/2015 1:52 PM >>>
Dear Mr. MacKay,

Pursuant to California Water Code, Division 6, Part 2.6, Sections 10610 through 10656, California Water Service is in the process of preparing the required 2015 update of our Urban Water Management Plans. These plans are required to be updated every five (5) years for each of our services areas (Districts). As you know our Stockton District provides water service to the City of Stockton.

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- Multi-family residential
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- Industrial
- Government (City or County parks, median strips, landscaping and schools)
- Dedicated Irrigation (rare)
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The forecasted growth rates are combined with a demand per service factor applicable to each customer class to determine the future water demands for the district. These growth factors are adjustable and we want to review them with you so that we are consistent with anticipated growth that your planning efforts forecast. If adjustments are necessary we can do them now and avoid conflicts and confusion later in this process.

Some specific information regarding our approach to forecasting customer service growth is detailed as follows:

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- **Commercial & Industrial** – Historical trend is a key influence in this customer class, however where we have seen negative trends in recent years for these categories due to the economic downturn, we typically employ either a zero rate of growth or a small, reasonable positive rate of growth. We have also undertaken during the last ten years some reassessment of customer service classifications that has resulted in reallocation of some customer service accounts between various classes. This reallocation, which included commercial, industrial, multi-family residential and in some cases government services, has made the analysis of growth a bit more difficult.

- **Government** – Growth trends are generally parallel to that of the residential sector, so we verify that our rate of grow is not dramatically out-of-sequence with the overall community.

- **Other** – The use of temporary-assigned construction meters varies considerably from year to year, and can represent considerable water demand. In this case, we select a growth rate that is stable, yet reflects the overall growth of the community.

We have included with this communication a set of tables and graphs (see attachment) that illustrate the parameters that influence the growth forecast as currently set up for this district. These include:

A. The historical and projected service data in both graph and table form
B. The 2000 and 2010 Census data for the districts service area
C. Housing projection chart comparing Cal Water's forecast (always in red) with those from other organizations
D. Population projection chart comparing Cal Water's forecast (always in red) with those from other organizations
E. Table of population and housing values along with multi-family residential unit density and persons per housing unit density that are employed in this forecast effort.

Please note that the 2015 data, which we need to include in our finished forecast, is not yet final, and some minor fluctuation of these values is possible.

Please examine these documents to determine if you concur with our forecasted housing and population numbers. It would be greatly appreciated if you could, by **September 11, 2015**, provide us with an indication of your support or in the case you do not agree with our forecast a reason why and the appropriate rate or growth pattern that we should employ. **If I do not hear back from you by the end of business (EOB) on the above date I will assume that you concur with our forecast.**

If you need a more detailed explanation of these numbers or want to review them with us please feel free to contact me at (408) 367-8340 or by email at tsalzano@calwater.com.

Thank you for your assistance in this effort.

Respectfully,

Thomas A. Salzano

Thomas A. Salzano
Water Resource Planning Supervisor

Danilo Blanusa, P.E.
Senior Engineer
CALIFORNIA WATER SERVICE
408-367-8387

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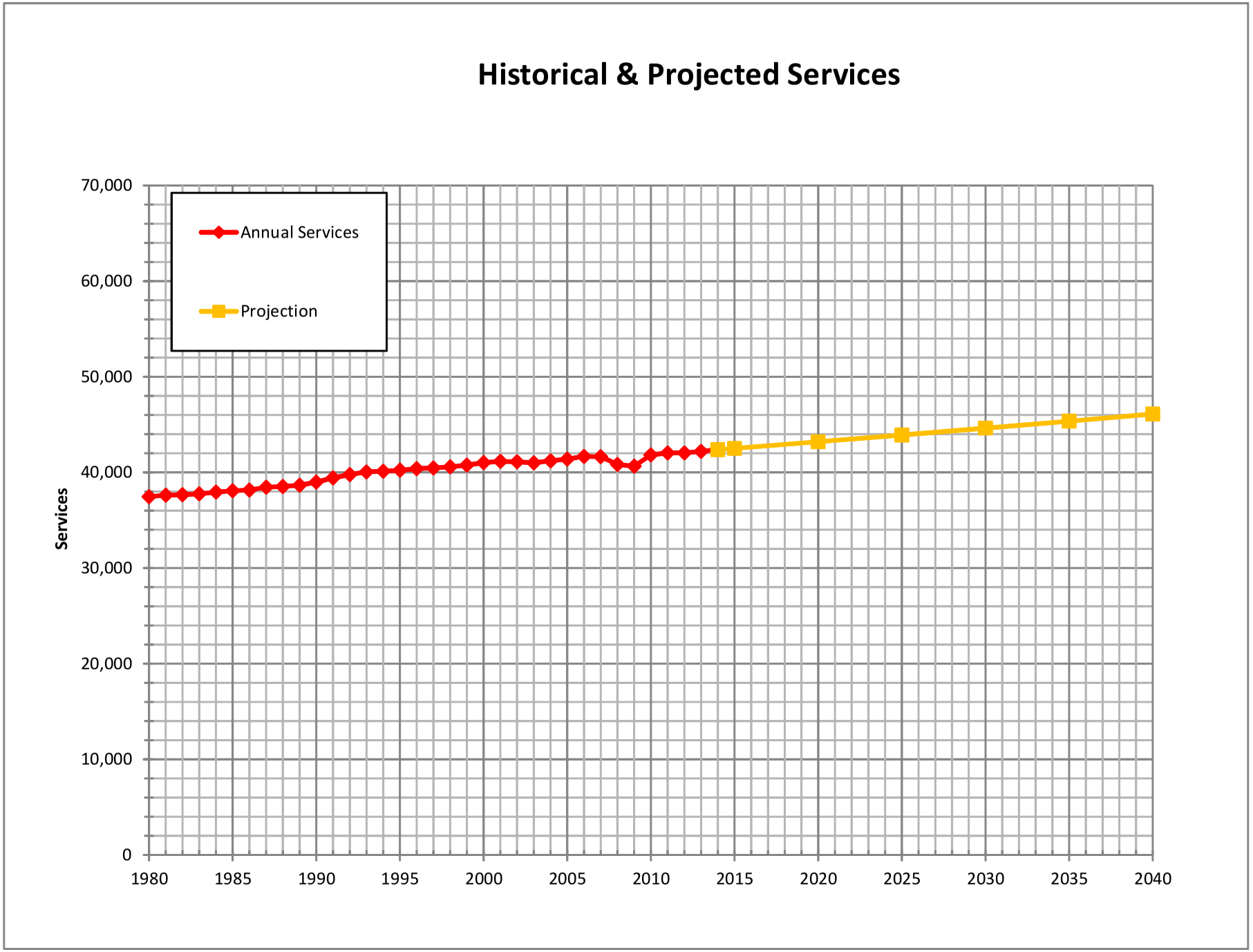
calwater.com


Historical & Projected Services
Annual Services
Projection
Services
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040

California Water Service Company - Stockton District

Worksheet 8

Water Supply and Demand Analysis and Projections

Actual & Projected Annual Average Services

Customer Category		Selected Trend		Growth Rate	Actual Services				Projected Services					
					2000	2005	2010	Base Year 2014	2015	2020	2025	2030	2035	2040
SFR		SFR_D	15 Yr. Avg.	0.30%	36,341	36,634	37,101	37,732	37,845	38,413	38,990	39,576	40,171	40,774
MFR		MFR_E	20 Yr. Avg.	0.99%	336	325	375	413	417	438	460	483	508	533
COM		COM_E	Overall 20 Yr. Avg.	0.51%	3,915	3,975	3,903	3,786	3,805	3,903	4,004	4,107	4,213	4,322
IND		IND_A	Zero Growth Rate	0.00%	91	86	84	83	83	83	83	83	83	83
GOV		GOV_C	10 Yr. Avg.	0.31%	305	308	325	321	321	326	332	337	342	347
OTH		OTH_C	10 Yr. Avg.	0.33%	27	36	23	38	38	39	40	40	41	42
TOTAL		Average growth rate 2011-2040		0.32%	41,014	41,364	41,811	42,372	42,509	43,203	43,908	44,626	45,357	46,101

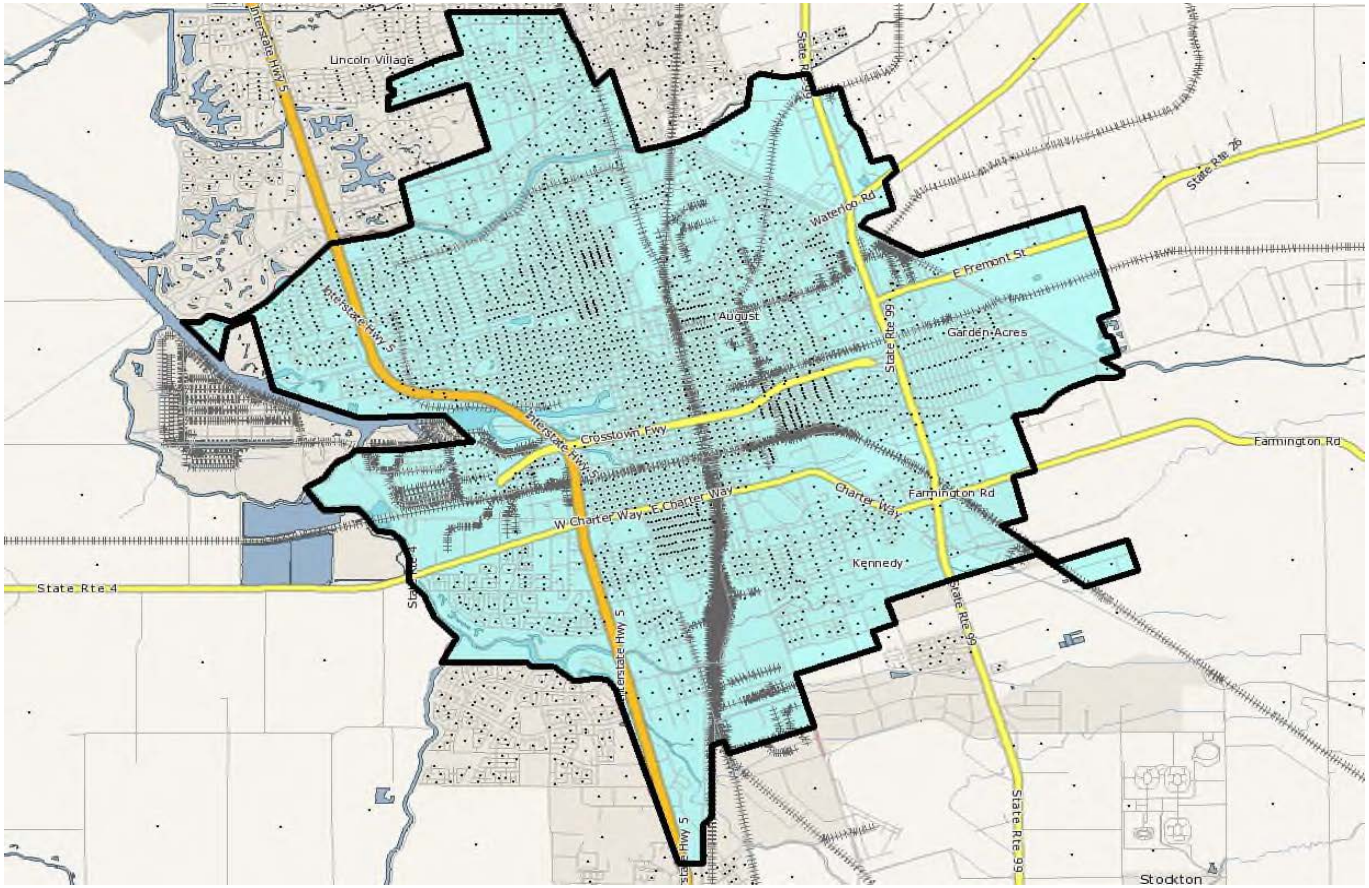
Notes:

California Water Service Company - Stockton District

Worksheet 12

Water Supply and Demand Analysis and Projections

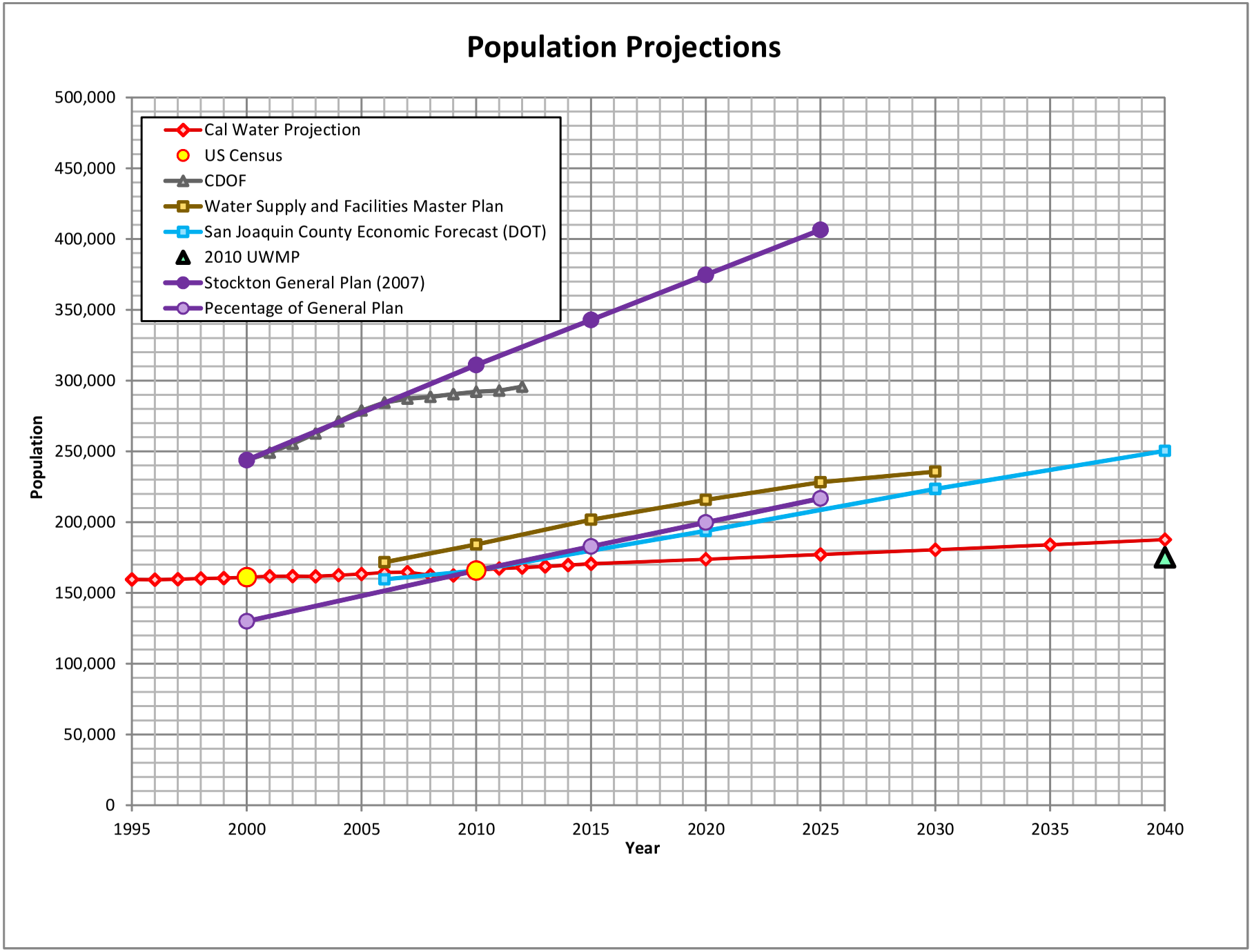
Marplot Summary



	US Census 2000 Summary				US Census 2010 Summary				2000-2010 Change		
	Census Blocks	Population	Housing Units (HU)	Density	Census Blocks	Population	Housing Units (HU)	Density	Percentage Population Change	Percentage HU Change	Density Change
Stockton	2,104	161,153	53,911	2.99	2,206	165,840	57,269	2.90	2.9%	6.2%	-3.1%
	2,104	161,153	53,911	2.99	2,206	165,840	57,269	2.90	2.9%	6.2%	-3.1%

MARPLOT disclaimer: The population and housing number given above are only rough estimates. They are based on the US Census Blocks. Although Census Blocks are polygons, MARPLOT uses the centoid, or center point, rather than the entire polygon. If a Census Block centroid is within any of the MARPLOT selected objects, the population and housing numbers for that block are tallied, even if only part of the block is within the selected object. It is possible for a block not be counted if its centroid is not within selected objects, even thought part of the block is within the selected objects.


Housing Projections
Total Residential Dwelling Units
US Census
CDOF
Water Supply and Facilities Master Plan
San Joaquin County Economic Forecast (DOT)
2010 UWMP
House/Service Count
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040
Year


Population Projections
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
Population
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040
Year
Cal Water Projection
US Census
CDOF
Water Supply and Facilities Master Plan
San Joaquin County Economic Forecast (DOT)
2010 UWMP
Stockton General Plan (2007)
Pecentage of General Plan

Attachment E

California Water Service Company - Stockton District

Worksheet 12

Water Supply and Demand Analysis and Projections

Population Estimate

Year	US Census		Persons per Housing Unit	Single Family Residential	Multi Family Residential			Flat Rate Residential
	Population	Housing Units		Services (DU)	Services	Residential Units (DU)	Unit Density	Services (DU)
2000	161,153	53,911	2.989	36,341	336	17,570	52.3	0
2010	165,840	57,269	2.896	37,101	375	20,168	53.8	0
	2.9%	6.2%	-3.1%	2.1%	11.6%	14.8%	2.9%	0.0%

	Year	Single Family Residential Services (DU)	Multi Family Residential			Flat Rate Residential Services (DU)	Total Residential Dwelling Units	Persons per Housing Unit	Estimated District Population	
			Services	Residential Units (DU)	Unit Density					
	1995	35,540	341	17,810	52.3	0	53,350	2.989	159,475	
	1996	35,755	336	17,548	52.3	0	53,304	2.989	159,337	
	1997	35,837	336	17,579	52.3	0	53,416	2.989	159,672	
	1998	35,952	337	17,644	52.3	0	53,596	2.989	160,211	
	1999	36,117	336	17,566	52.3	0	53,683	2.989	160,470	
	2000	36,341	336	17,570	52.3	0	53,911	2.989	161,153	
	2001	36,463	338	17,830	52.8	0	54,293	2.980	161,787	
	2002	36,399	331	18,090	54.7	0	54,489	2.971	161,863	
	2003	36,261	327	18,349	56.2	0	54,610	2.961	161,712	
	2004	36,456	326	18,609	57.1	0	55,065	2.952	162,546	
	2005	36,634	325	18,869	58.0	0	55,503	2.943	163,319	
	2006	36,923	321	19,129	59.6	0	56,052	2.933	164,410	
	2007	36,918	319	19,389	60.7	0	56,307	2.924	164,632	
	2008	36,127	349	19,649	56.4	0	55,776	2.914	162,559	
	2009	35,954	364	19,908	54.7	0	55,863	2.905	162,290	
	2010	37,101	375	20,168	53.8	0	57,269	2.896	165,840	
	2011	37,323	404	20,428	50.5	0	57,751	2.896	167,237	
/\	2012	37,361	408	20,639	50.5	0	58,000	2.896	167,956	/\
|	2013	37,521	411	20,744	50.5	0	58,265	2.896	168,724	|
ACTUAL	2014	37,732	413	20,853	50.5	0	58,586	2.896	169,653	ACTUAL
PROJECTED	2015	37,845	417	21,060	50.5	0	58,905	2.896	170,577	PROJECTED
|	2020	38,413	438	22,124	50.5	0	60,537	2.871	173,791	|
\/	2025	38,990	460	23,242	50.5	0	62,232	2.846	177,100	\/
	2030	39,576	483	24,416	50.5	0	63,992	2.821	180,509	
	2035	40,171	508	25,649	50.5	0	65,820	2.796	184,019	
	2040	40,774	533	26,945	50.5	0	67,719	2.771	187,636	

Notes: linear extrapolation used to estimated MFR-DU from 2000. Estimate extend until 2011 due to reclassification, afterwards a constant MFR Unit Density is used.

Blanusa, Danilo

From: David Stagnaro <David.Stagnaro@stocktongov.com>
Sent: Wednesday, September 16, 2015 5:12 PM
To: Salzano, Tom
Cc: Blanusa, Danilo; Bolzowski, Michael R.; Freeman, John Jr.; Keck, Jonathan; Kwong, David; MacKay, Gordon; Rubier, Regina
Subject: RE: Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Stockton District

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Blue Category

Mr. Salzano,

I appreciate your taking the City's comments into account. Based on the adjustments that lower the expected population and housing unit numbers, I think that the forecast is more realistic and therefore useful for resource planning purposes.

Thank you,

David Stagnaro, AICP
Planning Manager
345 N. El Dorado Street
Stockton, CA 95202
(209) 937-8598
david.stagnaro@stocktongov.com

"Effective July 15, 2011, the City of Stockton will begin using new e-mail addresses. My new e-mail address will be David.Stagnaro@stocktongov.com. Please make changes to your system(s) or list(s) to continue receiving communications from the City of Stockton."

>>> "Salzano, Tom" <TSalzano@calwater.com> 9/16/2015 2:57 PM >>>

Gordon,

I want to thank you for your comments on our growth forecasts that were prepared for the 2015 update of our Stockton Urban Water Management Plan. Regina Rubier had provided comments earlier expressing a similar concern that our growth rates were too aggressive for the current conditions in the City of Stockton. I had made some adjustments based on her comments to reduce the growth rate in single family homes from 0.5% per year to 0.3%, which lowered the forecasted increase in SFR dwelling units for the period 2015 to 2020 (and similarly in each future five year period) from 957 to 569. I did not make any changes to the MFR services or dwelling units knowing that redevelopment of our service area would shift growth to more, higher density multi-family facilities. T lower population further I reduced the population density in each dwelling unit to forecast a more moderate population increase to 187,720 people in 2014 instead of our prior projected population of 211,776. The single family adjustment alone did not impact population that significantly. Unfortunately I forgot to send those changes to you for your consideration.

Based on your comments and my current review of the SB610 Water Supply Assessment for the Open Window Project (OWP) Plan, I have further considered our forecasted MFR growth rate. I have reduced the rate from 1.43% to 0.99% per year. This rate lowers the forecasted increase in MFR dwelling units for 2015

Appendix C: Correspondences

- UWMP Public Draft Comments

Note: There were no comments received on the UWMP Public Draft.