# 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 Bear Gulch 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 Bear Gulch Customer Center located at 3525 Alameda De Las Pulgas, Suite A, Menlo Park, CA 94025.

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

Nicole Sandkulla
Senior Water Resources Planning Manager
Bay Area Water Supply and Conservation Agency
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# Appendix C: Correspondences

- Growth Projection Letter to Cities and Counties

## Blanusa, Danilo

**From:** Blanusa, Danilo
**Sent:** Thursday, August 20, 2015 9:28 AM
**To:** 'Virginia Parks (vkfparks@menlopark.org)'; 'Irv Meachum (immeachum@menlopark.org)'
**Cc:** Salzano, Tom; Bolzowski, Michael R.; Keck, Jonathan; Smithson, Dawn; Carrasco, Anthony
**Subject:** Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Bear Gulch District
**Attachments:** Letter to City Planning Officials - Attachmet - BG.pdf

**Tracking:**

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Dear Ms. Parks and Mr. Meachum,

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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
- Multi-family residential
- Commercial
- 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:

- **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

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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
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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,

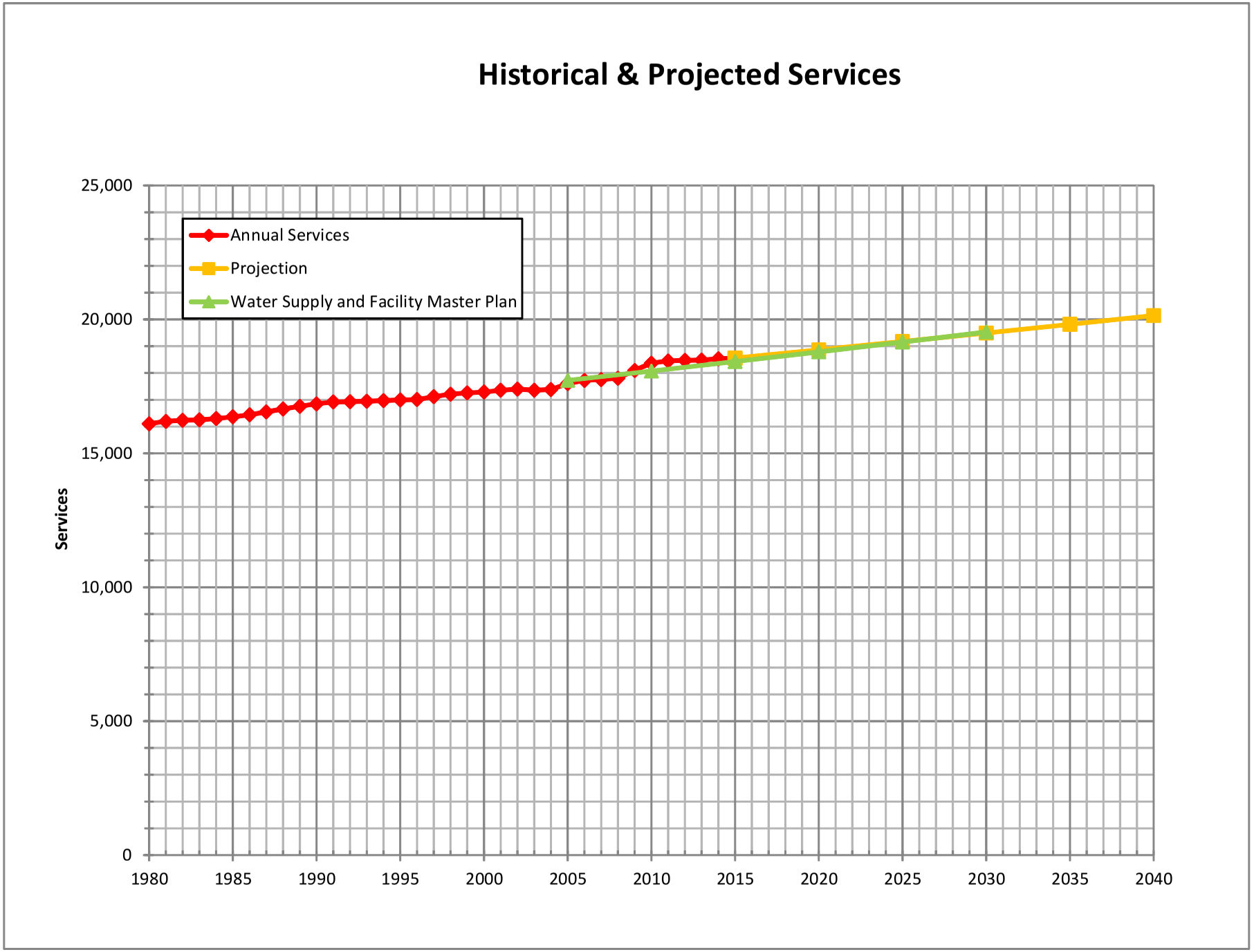
*Thomas A. Salzano*

Thomas A. Salzano
Water Resource Planning Supervisor

**Danilo Blanusa, P.E.**
**Senior Engineer**
**CALIFORNIA WATER SERVICE**

**408-367-8387**

**Quality. Service. Value.**
calwater.com


Historical & Projected Services
Annual Services
Projection
Water Supply and Facility Master Plan
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20,000
15,000
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5,000
0
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1985
1990
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040

# California Water Service Company - Bear Gulch 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 | 2015 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 |
| SFR | | SFR_B | 5 Yr. Avg. | 0.32% | 15,816 | 16,134 | 16,781 | 16,972 | 16,972 | 17,245 | 17,523 | 17,805 | 18,092 | 18,383 |
| MFR | | MFR_B | 5 Yr. Avg. | 1.72% | 64 | 63 | 75 | 89 | 89 | 97 | 105 | 115 | 125 | 136 |
| COM | | COM_D | 15 Yr. Avg. | 0.36% | 1,276 | 1,284 | 1,365 | 1,346 | 1,346 | 1,371 | 1,396 | 1,422 | 1,448 | 1,474 |
| IND | | IND_A | Zero Growth Rate | 0.00% | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| GOV | | GOV_C | 10 Yr. Avg. | 0.13% | 96 | 95 | 116 | 119 | 119 | 120 | 120 | 121 | 122 | 123 |
| OTH | | OTH_A | Zero Growth Rate | 0.00% | 34 | 30 | 24 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| IRR | | IRR_A | Zero Growth Rate | 0.00% | 0 | 0 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| TOTAL | | Average growth rate 2011-2040 | | 0.33% | 17,288 | 17,607 | 18,369 | 18,555 | 18,555 | 18,861 | 19,174 | 19,492 | 19,815 | 20,145 |

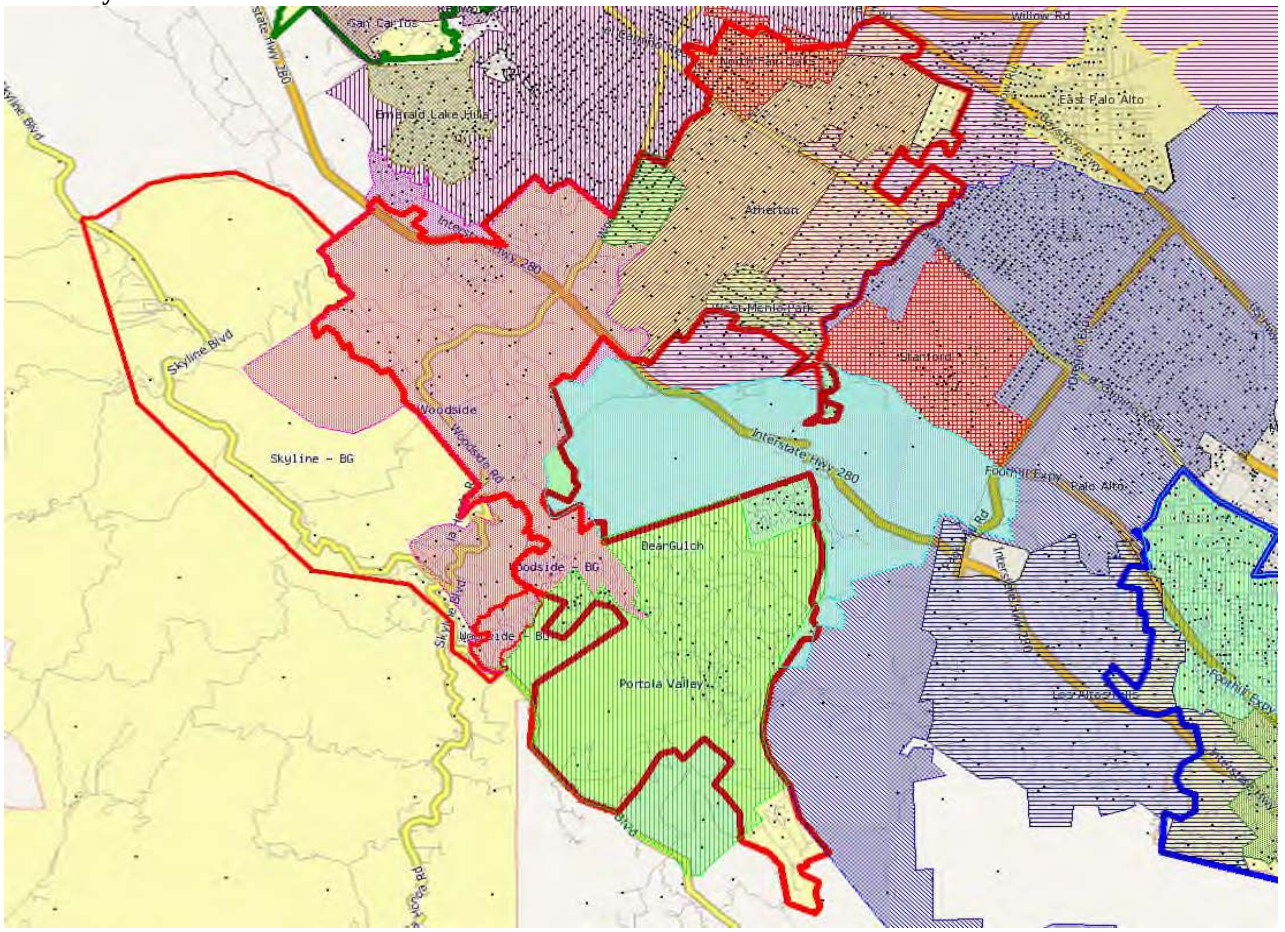
Notes:

# California Water Service Company - Bear Gulch District

Worksheet 12

## Water Supply and Demand Analysis and Projections

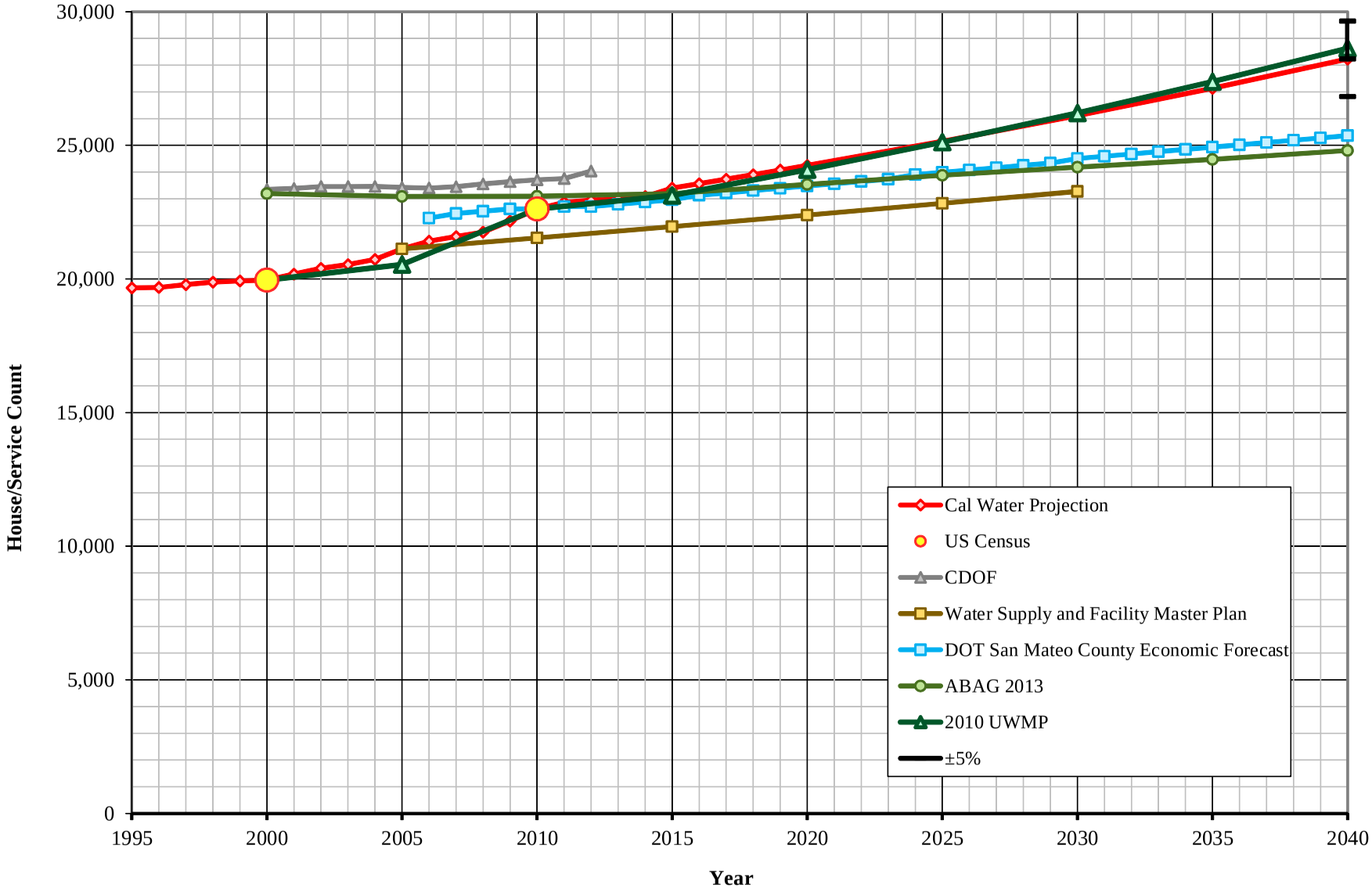
## Marplot Summary



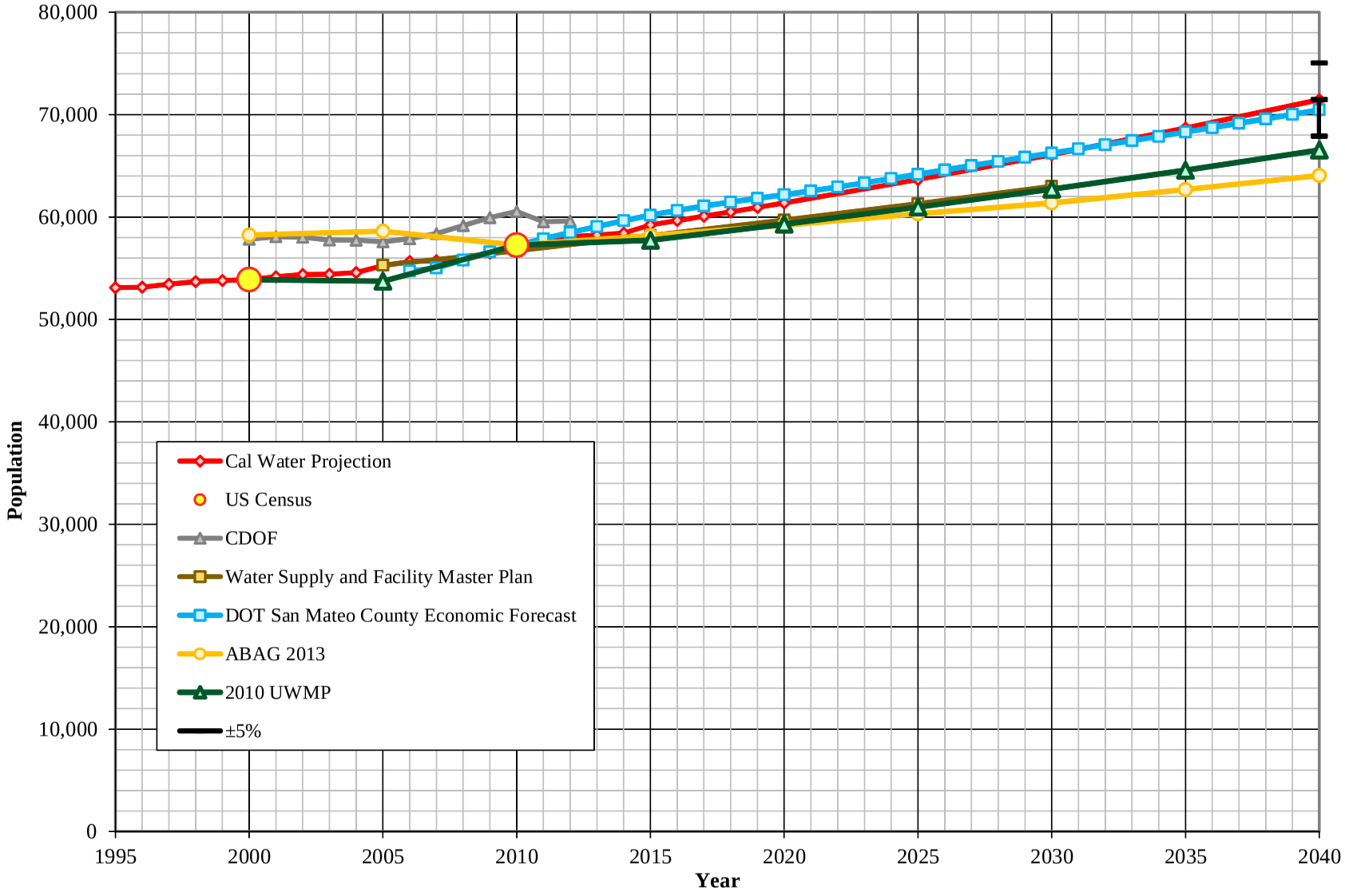

| | US Census 2000 Summary | | | | US Census 2010 Summary | | | | 2000-2010 Change | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System | Census Blocks | Population | Housing Units (HU) | Density | Census Blocks | Population | Housing Units (HU) | Density | Percentage Population Change | Percentage HU Change | Density Change |
| Bear Gulch | | | | | 698 | 55,736 | 21,956 | 2.54 | | | |
| Woodside | | | | | 3 | 183 | 85 | 2.15 | | | |
| Skyline | | | | | 45 | 1,335 | 579 | 2.31 | | | |
| Bear Gulch | 1,130 | 53,885 | 19,956 | 2.70 | 746 | 57,254 | 22,620 | 2.53 | 106.3% | 113.3% | 93.7% |

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



# Population Projections



# California Water Service Company - Bear Gulch District

Worksheet 12

## Water Supply and Demand Analysis and Projections

### Population Estimate

| | US Census | | Persons per Housing Unit | Single Family | Multi Family Residential | | | Flat Rate |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | | Residential | Unit | Residential |
| Year | Population | Housing Units | | Services (DU) | Services | Units (DU) | Density | Services (DU) |
| 2000 | 53,885 | 19,956 | 2.700 | 15,816 | 64 | 4,140 | 64.7 | 0 |
| 2010 | 57,254 | 22,620 | 2.531 | 16,781 | 75 | 5,839 | 77.4 | 0 |
| | 6.3% | 13.3% | -6.3% | 6.1% | 17.8% | 41.0% | 19.7% | 0.0% |

| | Year | Single Family Residential Services (DU) | Multi Family Residential Services | Multi Family Residential Units (DU) | Multi Family Residential Unit Density | Flat Rate Residential Services (DU) | Total Residential Dwelling Units | Persons per Housing Unit | Estimated District Population | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1995 | 15,532 | 64 | 4,135 | 64.7 | 0 | 19,667 | 2.700 | 53,104 | |
| | 1996 | 15,543 | 64 | 4,140 | 64.7 | 0 | 19,683 | 2.700 | 53,149 | |
| | 1997 | 15,650 | 64 | 4,140 | 64.7 | 0 | 19,790 | 2.700 | 53,437 | |
| | 1998 | 15,743 | 64 | 4,140 | 64.7 | 0 | 19,884 | 2.700 | 53,690 | |
| | 1999 | 15,785 | 64 | 4,140 | 64.7 | 0 | 19,925 | 2.700 | 53,802 | |
| | 2000 | 15,816 | 64 | 4,140 | 64.7 | 0 | 19,956 | 2.700 | 53,885 | |
| | 2001 | 15,875 | 64 | 4,310 | 67.3 | 0 | 20,185 | 2.683 | 54,162 | |
| | 2002 | 15,919 | 64 | 4,480 | 70.0 | 0 | 20,399 | 2.666 | 54,392 | |
| | 2003 | 15,890 | 64 | 4,650 | 72.7 | 0 | 20,540 | 2.649 | 54,421 | |
| | 2004 | 15,910 | 64 | 4,820 | 75.3 | 0 | 20,730 | 2.633 | 54,574 | |
| | 2005 | 16,134 | 63 | 4,990 | 78.7 | 0 | 21,124 | 2.616 | 55,252 | |
| | 2006 | 16,255 | 63 | 5,160 | 82.1 | 0 | 21,415 | 2.599 | 55,651 | |
| | 2007 | 16,260 | 63 | 5,330 | 84.8 | 0 | 21,590 | 2.582 | 55,741 | |
| | 2008 | 16,252 | 70 | 5,499 | 78.3 | 0 | 21,751 | 2.565 | 55,791 | |
| | 2009 | 16,498 | 76 | 5,669 | 75.0 | 0 | 22,168 | 2.548 | 56,484 | |
| | 2010 | 16,781 | 75 | 5,839 | 77.4 | 0 | 22,620 | 2.531 | 57,254 | |
| | 2011 | 16,857 | 83 | 6,009 | 72.3 | 0 | 22,866 | 2.531 | 57,876 | |
| | 2012 | 16,884 | 84 | 6,069 | 72.3 | 0 | 22,954 | 2.531 | 58,098 | |
| ^ | 2013 | 16,887 | 85 | 6,124 | 72.3 | 0 | 23,010 | 2.531 | 58,242 | ^ |
| \| | 2014 | 16,944 | 85 | 6,142 | 72.3 | 0 | 23,085 | 2.531 | 58,432 | \| |
| ACTUAL | 2015 | 16,972 | 89 | 6,430 | 72.3 | 0 | 23,402 | 2.531 | 59,233 | ACTUAL |
| PROJECTED | 2016 | 17,026 | 90 | 6,541 | 72.3 | 0 | 23,567 | 2.531 | 59,651 | PROJECTED |
| \| | 2017 | 17,081 | 92 | 6,653 | 72.3 | 0 | 23,734 | 2.531 | 60,074 | \| |
| v | 2018 | 17,135 | 94 | 6,768 | 72.3 | 0 | 23,903 | 2.531 | 60,502 | v |
| | 2019 | 17,190 | 95 | 6,884 | 72.3 | 0 | 24,074 | 2.531 | 60,935 | |
| | 2020 | 17,245 | 97 | 7,002 | 72.3 | 0 | 24,248 | 2.531 | 61,374 | |
| | 2025 | 17,523 | 105 | 7,626 | 72.3 | 0 | 25,149 | 2.531 | 63,654 | |
| | 2030 | 17,805 | 115 | 8,304 | 72.3 | 0 | 26,110 | 2.531 | 66,087 | |
| | 2035 | 18,092 | 125 | 9,044 | 72.3 | 0 | 27,135 | 2.531 | 68,683 | |
| | 2040 | 18,383 | 136 | 9,849 | 72.3 | 0 | 28,232 | 2.531 | 71,458 | |

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:** Thursday, August 20, 2015 9:48 AM
**To:** 'John Maltbie (jmaltbie@smcgov.org)'
**Cc:** Salzano, Tom; Bolzowski, Michael R.; Keck, Jonathan; Smithson, Dawn; Carrasco, Anthony
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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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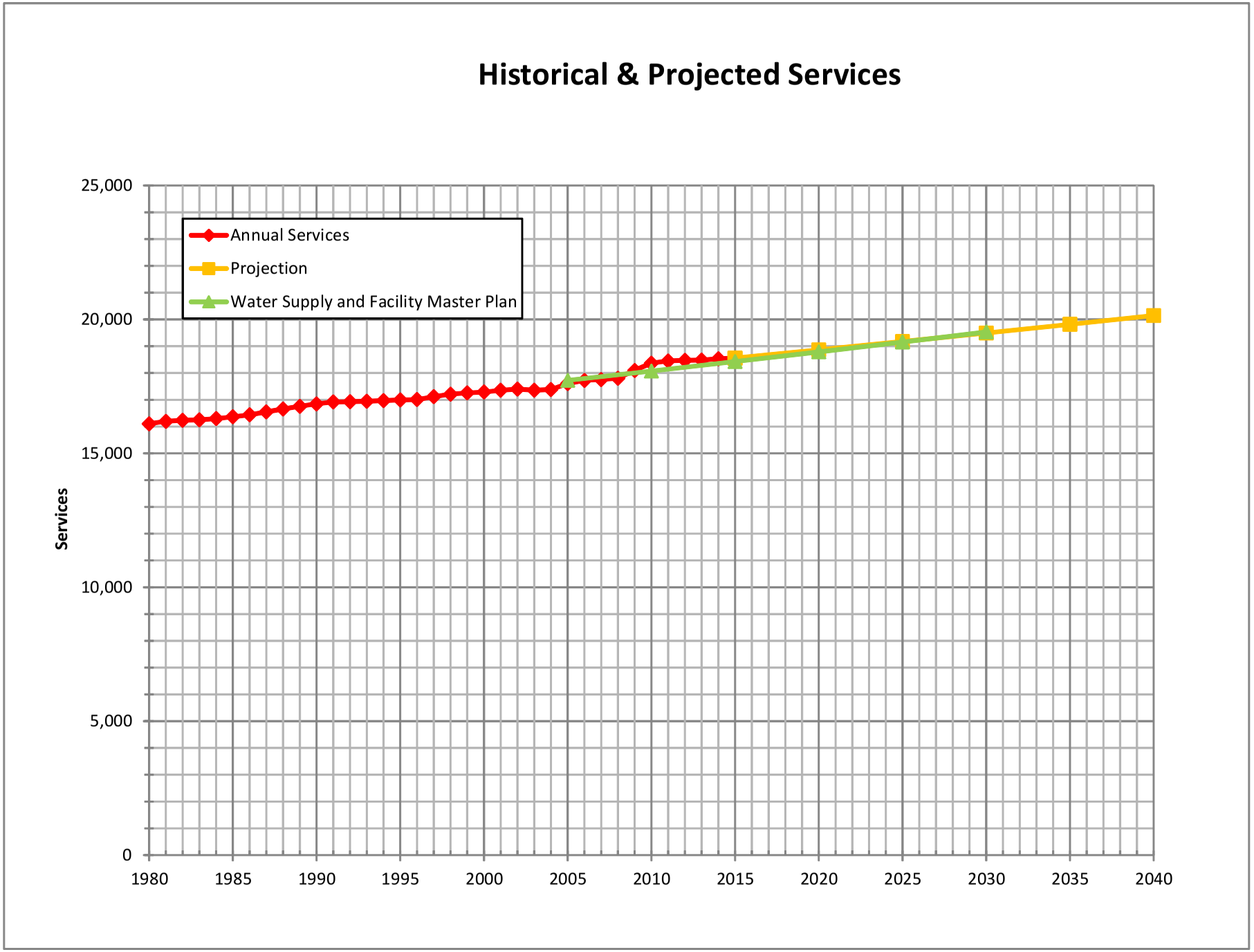
Historical & Projected Services
Annual Services
Projection
Water Supply and Facility Master Plan
Services
25,000
20,000
15,000
10,000
5,000
0
1980
1985
1990
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2020
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# California Water Service Company - Bear Gulch 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 | 2015 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 |
| SFR | | SFR_B | 5 Yr. Avg. | 0.32% | 15,816 | 16,134 | 16,781 | 16,972 | 16,972 | 17,245 | 17,523 | 17,805 | 18,092 | 18,383 |
| MFR | | MFR_B | 5 Yr. Avg. | 1.72% | 64 | 63 | 75 | 89 | 89 | 97 | 105 | 115 | 125 | 136 |
| COM | | COM_D | 15 Yr. Avg. | 0.36% | 1,276 | 1,284 | 1,365 | 1,346 | 1,346 | 1,371 | 1,396 | 1,422 | 1,448 | 1,474 |
| IND | | IND_A | Zero Growth Rate | 0.00% | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| GOV | | GOV_C | 10 Yr. Avg. | 0.13% | 96 | 95 | 116 | 119 | 119 | 120 | 120 | 121 | 122 | 123 |
| OTH | | OTH_A | Zero Growth Rate | 0.00% | 34 | 30 | 24 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| IRR | | IRR_A | Zero Growth Rate | 0.00% | 0 | 0 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| TOTAL | | Average growth rate 2011-2040 | | 0.33% | 17,288 | 17,607 | 18,369 | 18,555 | 18,555 | 18,861 | 19,174 | 19,492 | 19,815 | 20,145 |

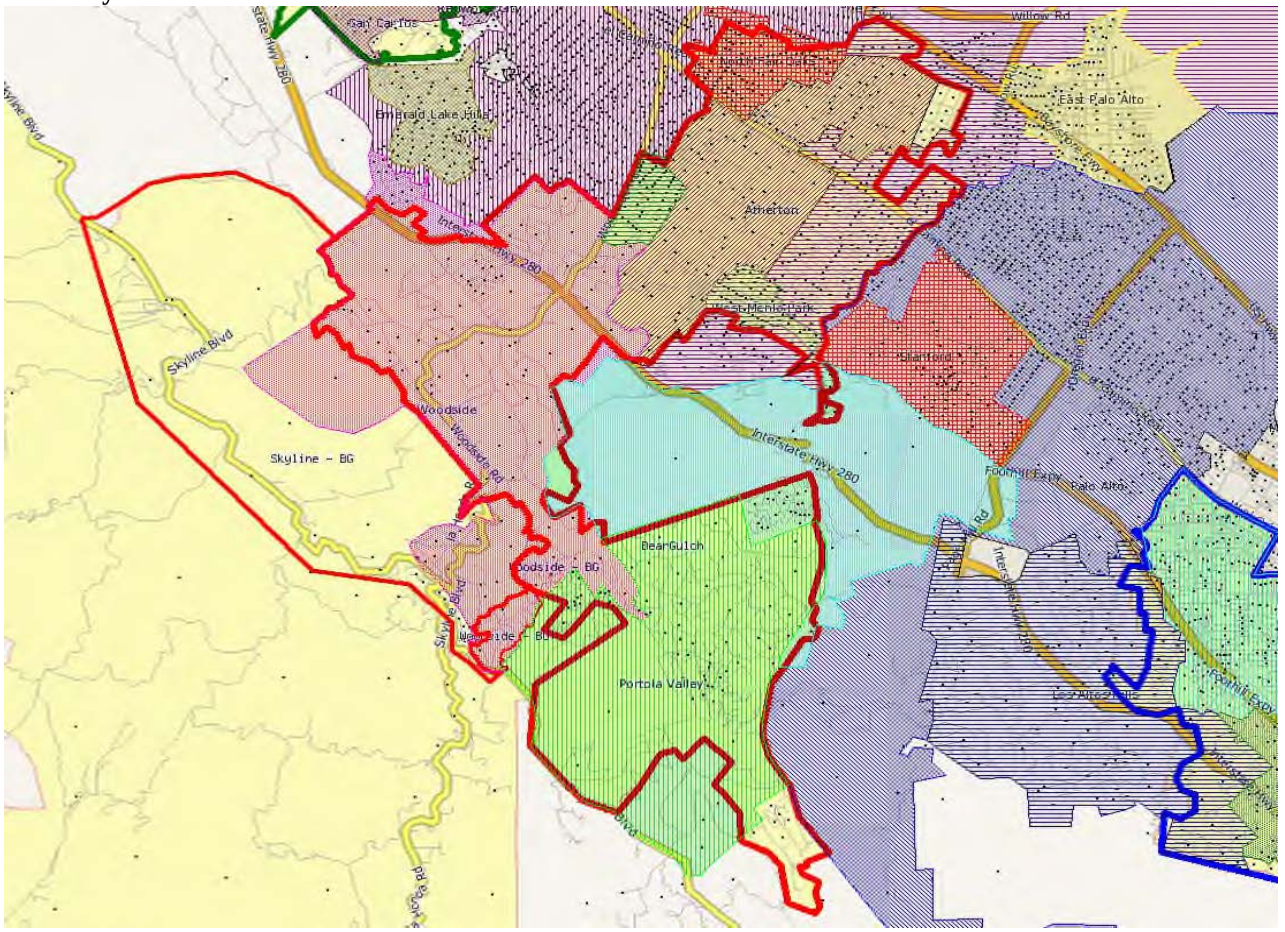
Notes:

# California Water Service Company - Bear Gulch District

Worksheet 12

## Water Supply and Demand Analysis and Projections

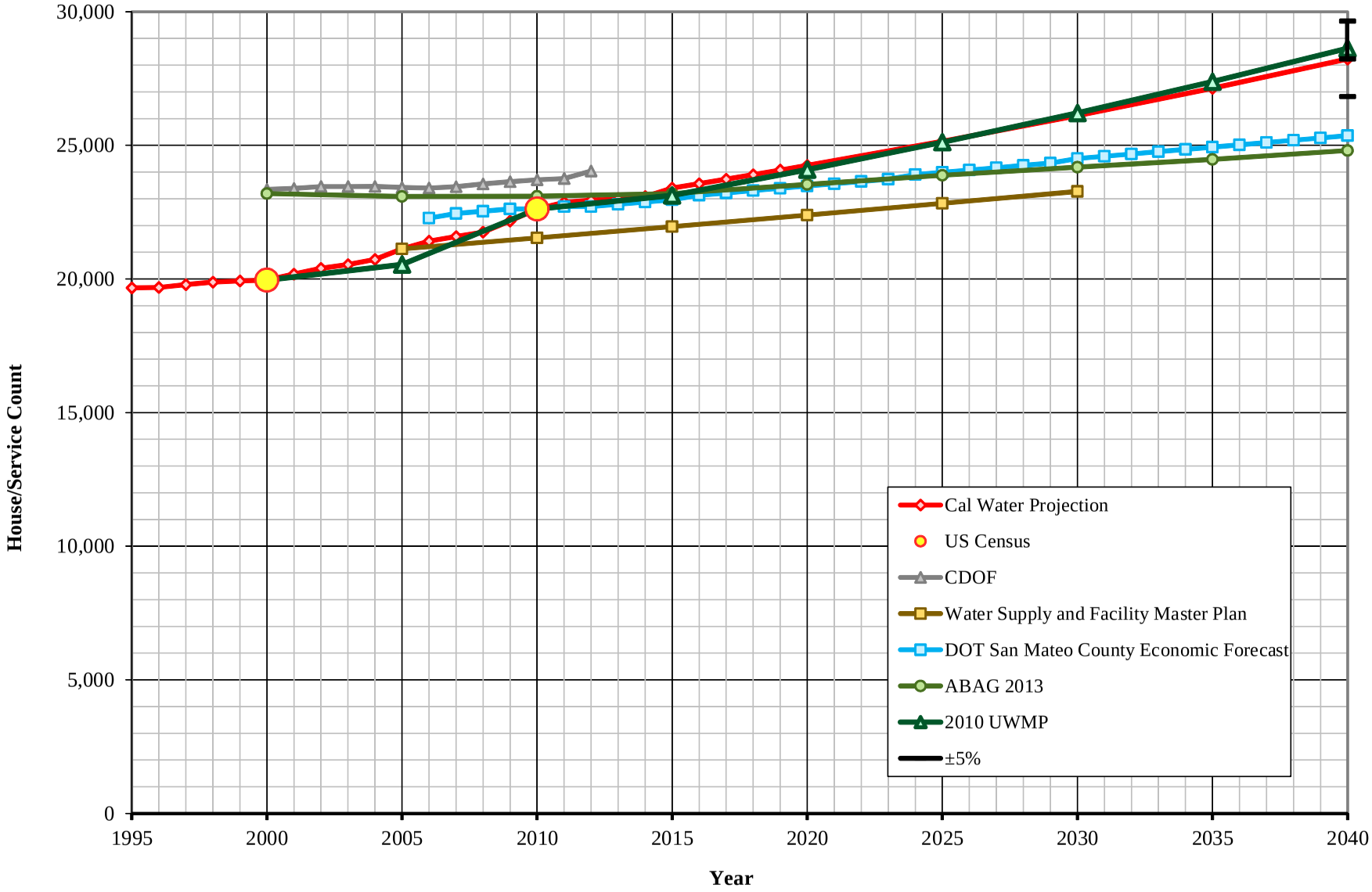
## Marplot Summary



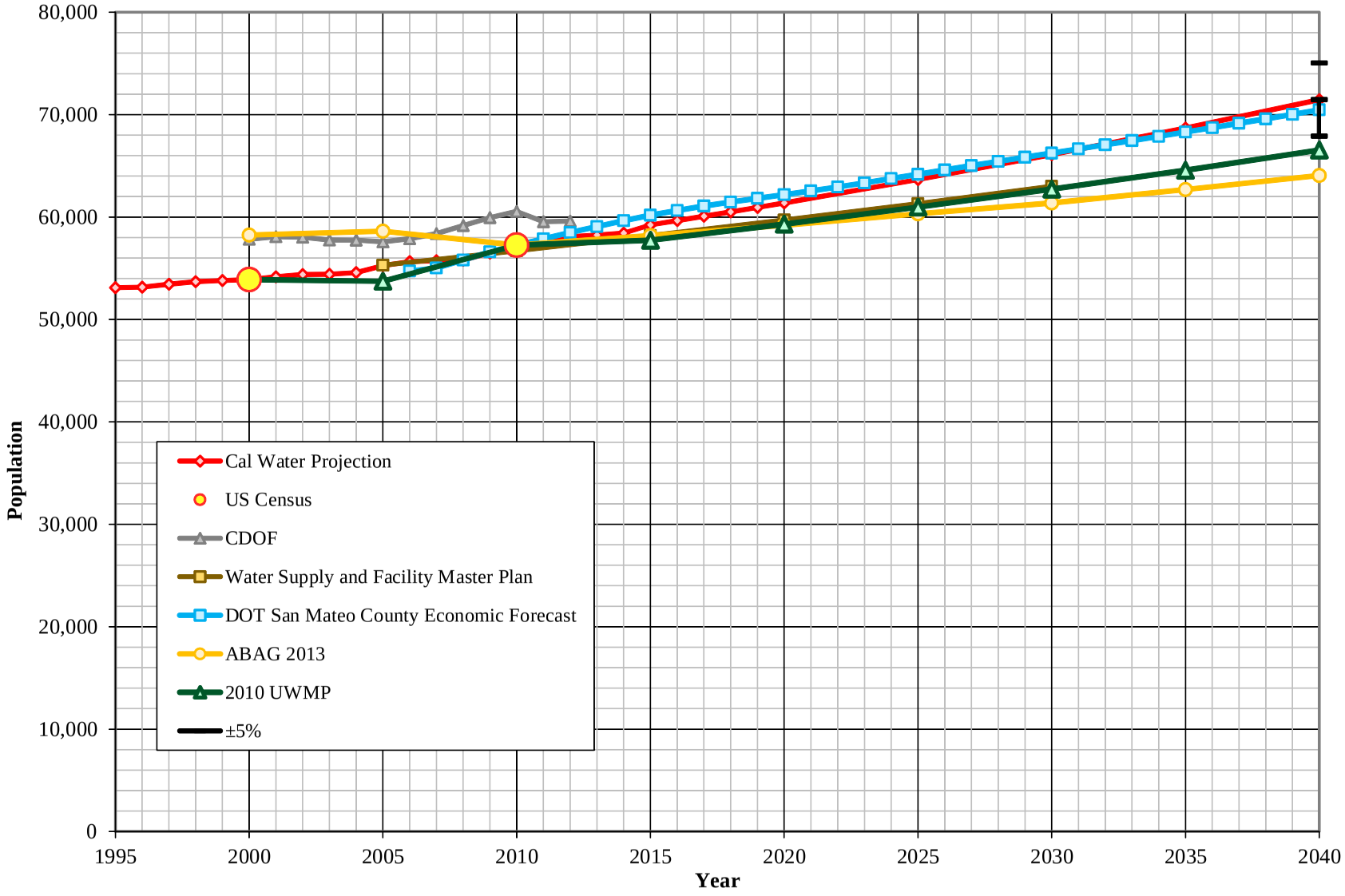

| | US Census 2000 Summary | | | | US Census 2010 Summary | | | | 2000-2010 Change | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System | Census Blocks | Population | Housing Units (HU) | Density | Census Blocks | Population | Housing Units (HU) | Density | Percentage Population Change | Percentage HU Change | Density Change |
| Bear Gulch | | | | | 698 | 55,736 | 21,956 | 2.54 | | | |
| Woodside | | | | | 3 | 183 | 85 | 2.15 | | | |
| Skyline | | | | | 45 | 1,335 | 579 | 2.31 | | | |
| Bear Gulch | 1,130 | 53,885 | 19,956 | 2.70 | 746 | 57,254 | 22,620 | 2.53 | 106.3% | 113.3% | 93.7% |

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



# Population Projections



# California Water Service Company - Bear Gulch District

Worksheet 12

## Water Supply and Demand Analysis and Projections

### Population Estimate

| | US Census | | Persons per Housing Unit | Single Family | Multi Family Residential | | | Flat Rate |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | | Residential | Unit | Residential |
| Year | Population | Housing Units | | Services (DU) | Services | Units (DU) | Density | Services (DU) |
| 2000 | 53,885 | 19,956 | 2.700 | 15,816 | 64 | 4,140 | 64.7 | 0 |
| 2010 | 57,254 | 22,620 | 2.531 | 16,781 | 75 | 5,839 | 77.4 | 0 |
| | 6.3% | 13.3% | -6.3% | 6.1% | 17.8% | 41.0% | 19.7% | 0.0% |

| | Year | Single Family Residential Services (DU) | Multi Family Residential Services | Multi Family Residential Units (DU) | Multi Family Residential Unit Density | Flat Rate Residential Services (DU) | Total Residential Dwelling Units | Persons per Housing Unit | Estimated District Population | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1995 | 15,532 | 64 | 4,135 | 64.7 | 0 | 19,667 | 2.700 | 53,104 | |
| | 1996 | 15,543 | 64 | 4,140 | 64.7 | 0 | 19,683 | 2.700 | 53,149 | |
| | 1997 | 15,650 | 64 | 4,140 | 64.7 | 0 | 19,790 | 2.700 | 53,437 | |
| | 1998 | 15,743 | 64 | 4,140 | 64.7 | 0 | 19,884 | 2.700 | 53,690 | |
| | 1999 | 15,785 | 64 | 4,140 | 64.7 | 0 | 19,925 | 2.700 | 53,802 | |
| | 2000 | 15,816 | 64 | 4,140 | 64.7 | 0 | 19,956 | 2.700 | 53,885 | |
| | 2001 | 15,875 | 64 | 4,310 | 67.3 | 0 | 20,185 | 2.683 | 54,162 | |
| | 2002 | 15,919 | 64 | 4,480 | 70.0 | 0 | 20,399 | 2.666 | 54,392 | |
| | 2003 | 15,890 | 64 | 4,650 | 72.7 | 0 | 20,540 | 2.649 | 54,421 | |
| | 2004 | 15,910 | 64 | 4,820 | 75.3 | 0 | 20,730 | 2.633 | 54,574 | |
| | 2005 | 16,134 | 63 | 4,990 | 78.7 | 0 | 21,124 | 2.616 | 55,252 | |
| | 2006 | 16,255 | 63 | 5,160 | 82.1 | 0 | 21,415 | 2.599 | 55,651 | |
| | 2007 | 16,260 | 63 | 5,330 | 84.8 | 0 | 21,590 | 2.582 | 55,741 | |
| | 2008 | 16,252 | 70 | 5,499 | 78.3 | 0 | 21,751 | 2.565 | 55,791 | |
| | 2009 | 16,498 | 76 | 5,669 | 75.0 | 0 | 22,168 | 2.548 | 56,484 | |
| | 2010 | 16,781 | 75 | 5,839 | 77.4 | 0 | 22,620 | 2.531 | 57,254 | |
| | 2011 | 16,857 | 83 | 6,009 | 72.3 | 0 | 22,866 | 2.531 | 57,876 | |
| | 2012 | 16,884 | 84 | 6,069 | 72.3 | 0 | 22,954 | 2.531 | 58,098 | |
| ^ | 2013 | 16,887 | 85 | 6,124 | 72.3 | 0 | 23,010 | 2.531 | 58,242 | ^ |
| \| | 2014 | 16,944 | 85 | 6,142 | 72.3 | 0 | 23,085 | 2.531 | 58,432 | \| |
| ACTUAL | 2015 | 16,972 | 89 | 6,430 | 72.3 | 0 | 23,402 | 2.531 | 59,233 | ACTUAL |
| PROJECTED | 2016 | 17,026 | 90 | 6,541 | 72.3 | 0 | 23,567 | 2.531 | 59,651 | PROJECTED |
| \| | 2017 | 17,081 | 92 | 6,653 | 72.3 | 0 | 23,734 | 2.531 | 60,074 | \| |
| v | 2018 | 17,135 | 94 | 6,768 | 72.3 | 0 | 23,903 | 2.531 | 60,502 | v |
| | 2019 | 17,190 | 95 | 6,884 | 72.3 | 0 | 24,074 | 2.531 | 60,935 | |
| | 2020 | 17,245 | 97 | 7,002 | 72.3 | 0 | 24,248 | 2.531 | 61,374 | |
| | 2025 | 17,523 | 105 | 7,626 | 72.3 | 0 | 25,149 | 2.531 | 63,654 | |
| | 2030 | 17,805 | 115 | 8,304 | 72.3 | 0 | 26,110 | 2.531 | 66,087 | |
| | 2035 | 18,092 | 125 | 9,044 | 72.3 | 0 | 27,135 | 2.531 | 68,683 | |
| | 2040 | 18,383 | 136 | 9,849 | 72.3 | 0 | 28,232 | 2.531 | 71,458 | |

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:** Thursday, August 20, 2015 9:52 AM
**To:** 'Howard Young (hyoung@portolavalley.net)'
**Cc:** Salzano, Tom; Bolzowski, Michael R.; Keck, Jonathan; Smithson, Dawn; Carrasco, Anthony
**Subject:** Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Bear Gulch District
**Attachments:** Letter to City Planning Officials - Attachmet - BG.pdf

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Dear Mr. Young,

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 Bear Gulch District provides water service to the Town of Portola Valley.

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,

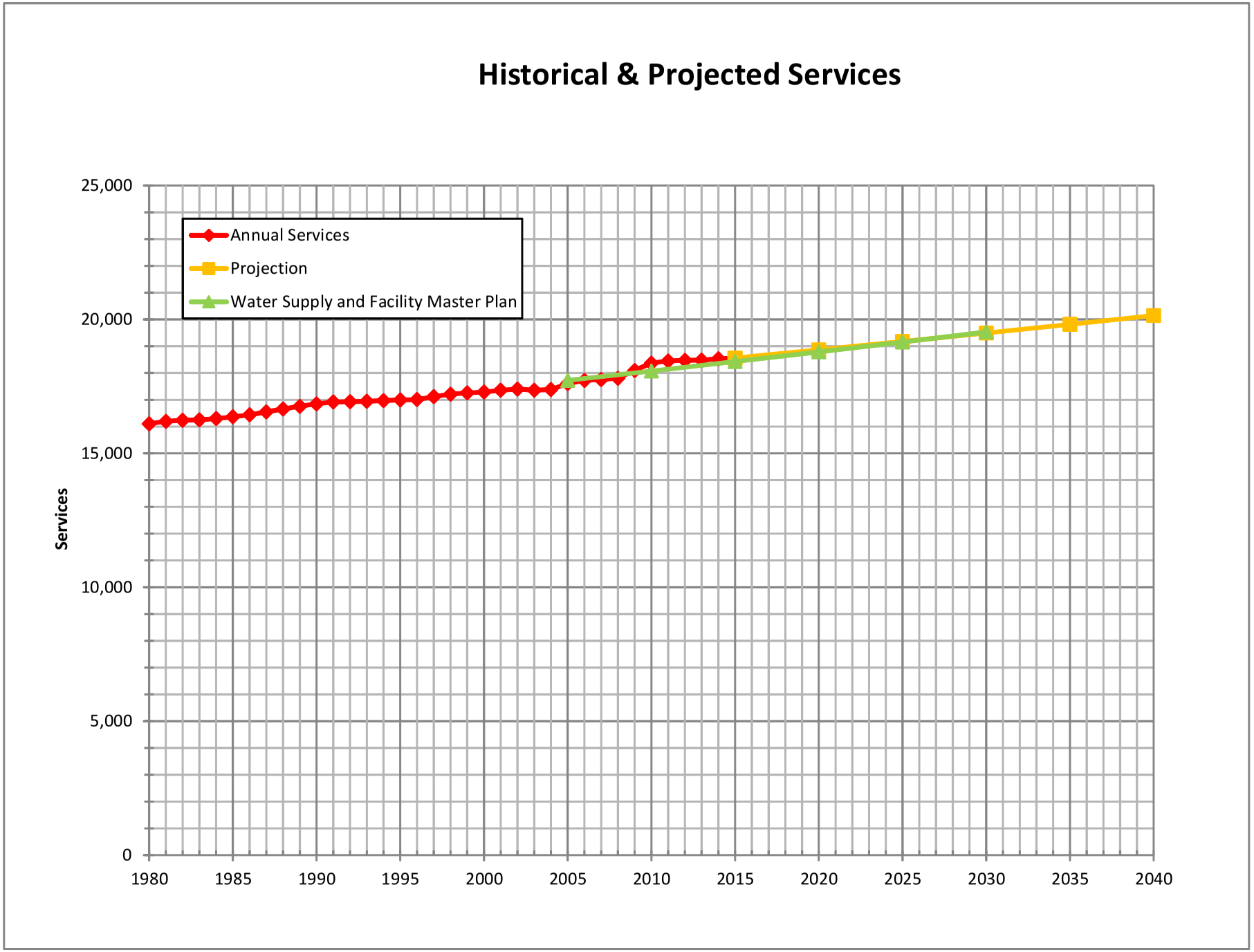
*Thomas A. Salzano*

Thomas A. Salzano
Water Resource Planning Supervisor

**Danilo Blanusa, P.E.**
**Senior Engineer**
**CALIFORNIA WATER SERVICE**

**408-367-8387**

**Quality. Service. Value.**
calwater.com


Historical & Projected Services
Annual Services
Projection
Water Supply and Facility Master Plan
Services
25,000
20,000
15,000
10,000
5,000
0
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040

# California Water Service Company - Bear Gulch 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 | 2015 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 |
| SFR | | SFR_B | 5 Yr. Avg. | 0.32% | 15,816 | 16,134 | 16,781 | 16,972 | 16,972 | 17,245 | 17,523 | 17,805 | 18,092 | 18,383 |
| MFR | | MFR_B | 5 Yr. Avg. | 1.72% | 64 | 63 | 75 | 89 | 89 | 97 | 105 | 115 | 125 | 136 |
| COM | | COM_D | 15 Yr. Avg. | 0.36% | 1,276 | 1,284 | 1,365 | 1,346 | 1,346 | 1,371 | 1,396 | 1,422 | 1,448 | 1,474 |
| IND | | IND_A | Zero Growth Rate | 0.00% | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| GOV | | GOV_C | 10 Yr. Avg. | 0.13% | 96 | 95 | 116 | 119 | 119 | 120 | 120 | 121 | 122 | 123 |
| OTH | | OTH_A | Zero Growth Rate | 0.00% | 34 | 30 | 24 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| IRR | | IRR_A | Zero Growth Rate | 0.00% | 0 | 0 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| TOTAL | | Average growth rate 2011-2040 | | 0.33% | 17,288 | 17,607 | 18,369 | 18,555 | 18,555 | 18,861 | 19,174 | 19,492 | 19,815 | 20,145 |

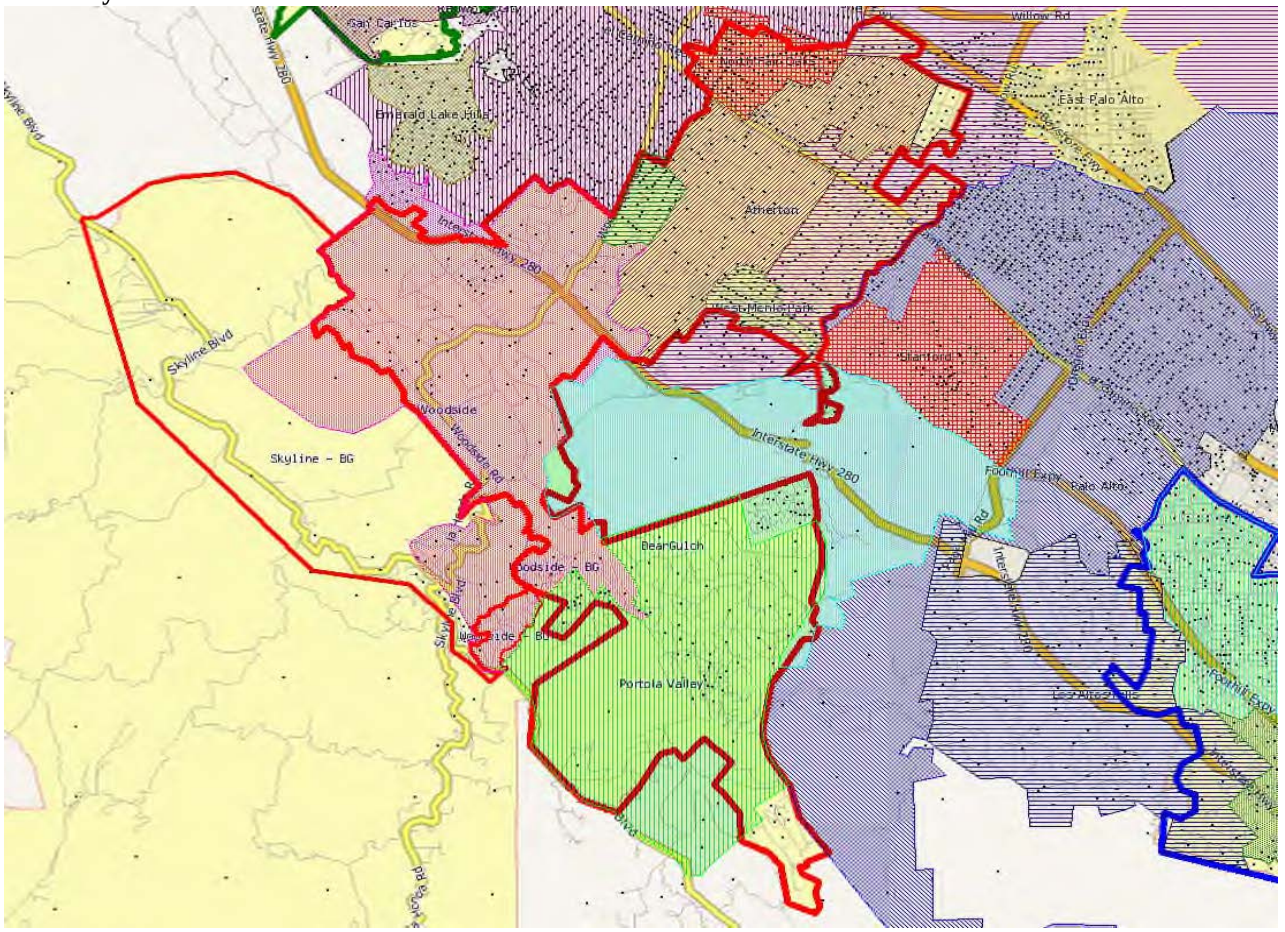
Notes:

# California Water Service Company - Bear Gulch District

Worksheet 12

## Water Supply and Demand Analysis and Projections

## Marplot Summary




| | US Census 2000 Summary | | | | US Census 2010 Summary | | | | 2000-2010 Change | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System | Census Blocks | Population | Housing Units (HU) | Density | Census Blocks | Population | Housing Units (HU) | Density | Percentage Population Change | Percentage HU Change | Density Change |
| Bear Gulch | | | | | 698 | 55,736 | 21,956 | 2.54 | | | |
| Woodside | | | | | 3 | 183 | 85 | 2.15 | | | |
| Skyline | | | | | 45 | 1,335 | 579 | 2.31 | | | |
| Bear Gulch | 1,130 | 53,885 | 19,956 | 2.70 | 746 | 57,254 | 22,620 | 2.53 | 106.3% | 113.3% | 93.7% |

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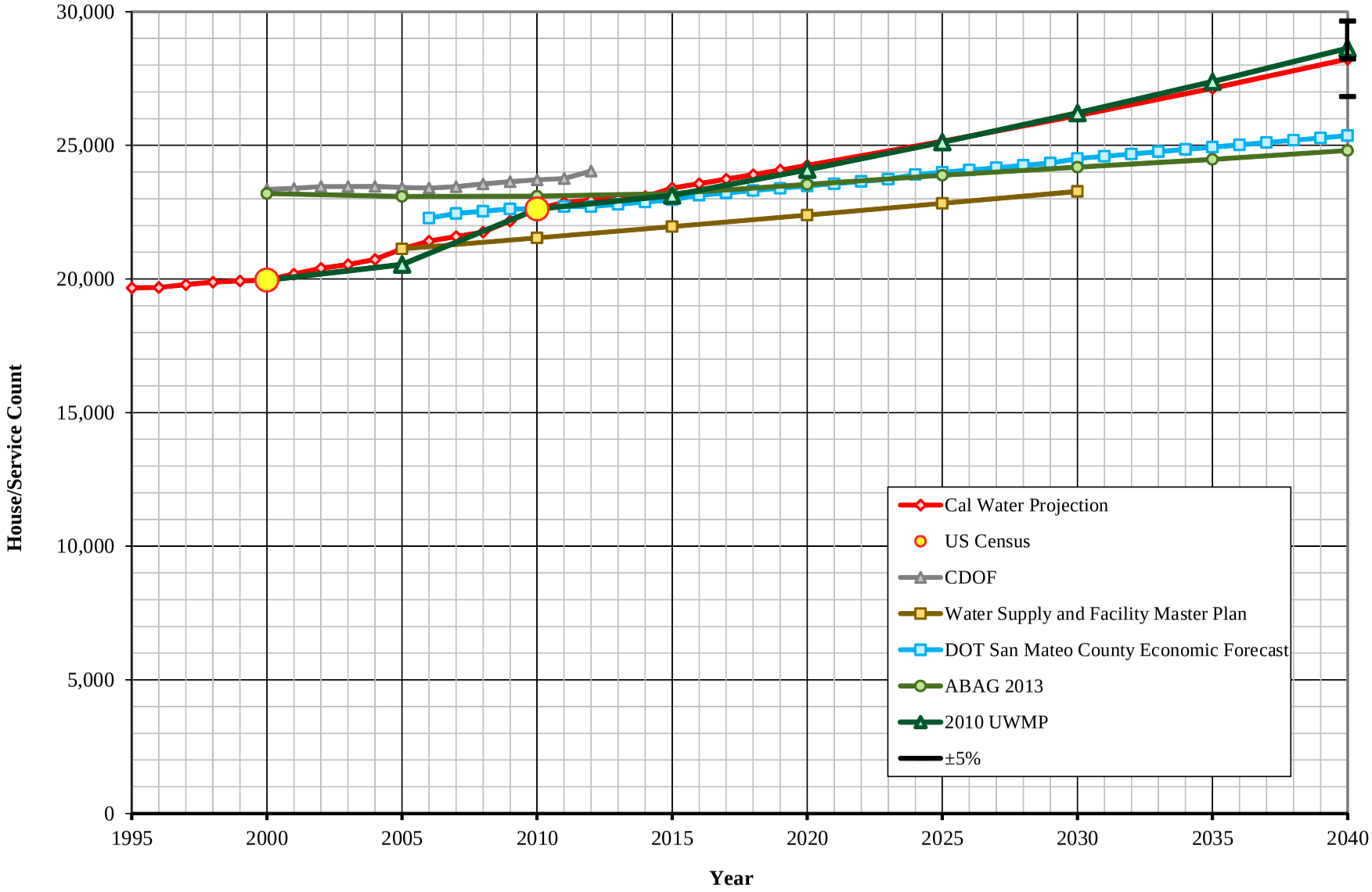
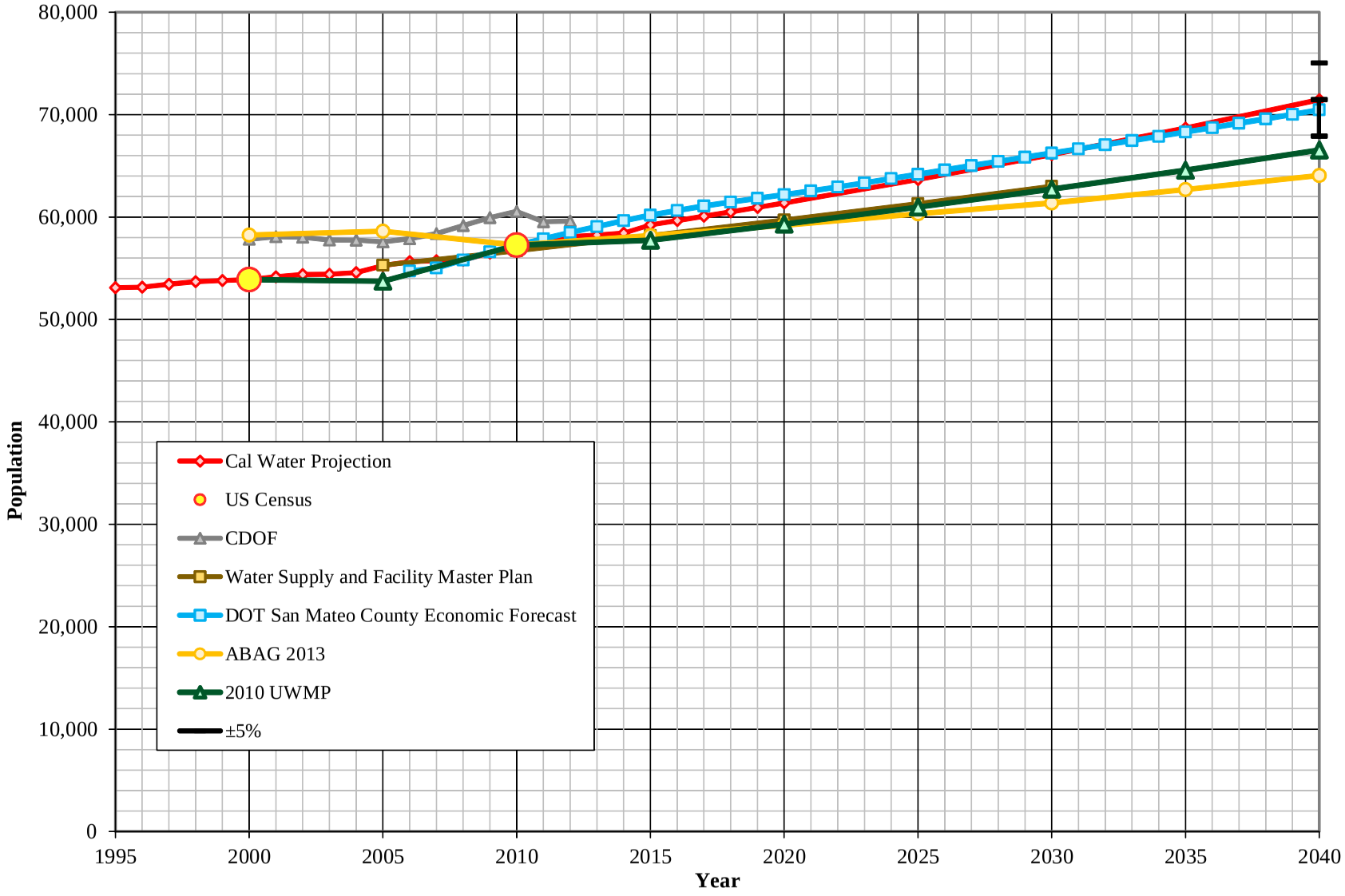
# Housing Projections



# Population Projections



# California Water Service Company - Bear Gulch District

Worksheet 12

## Water Supply and Demand Analysis and Projections

### Population Estimate

| | US Census | | Persons per Housing Unit | Single Family | Multi Family Residential | | | Flat Rate |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | | Residential | Unit | Residential |
| Year | Population | Housing Units | | Services (DU) | Services | Units (DU) | Density | Services (DU) |
| 2000 | 53,885 | 19,956 | 2.700 | 15,816 | 64 | 4,140 | 64.7 | 0 |
| 2010 | 57,254 | 22,620 | 2.531 | 16,781 | 75 | 5,839 | 77.4 | 0 |
| | 6.3% | 13.3% | -6.3% | 6.1% | 17.8% | 41.0% | 19.7% | 0.0% |

| | Year | Single Family Residential Services (DU) | Multi Family Residential Services | Multi Family Residential Units (DU) | Multi Family Residential Unit Density | Flat Rate Residential Services (DU) | Total Residential Dwelling Units | Persons per Housing Unit | Estimated District Population | |
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| | 1997 | 15,650 | 64 | 4,140 | 64.7 | 0 | 19,790 | 2.700 | 53,437 | |
| | 1998 | 15,743 | 64 | 4,140 | 64.7 | 0 | 19,884 | 2.700 | 53,690 | |
| | 1999 | 15,785 | 64 | 4,140 | 64.7 | 0 | 19,925 | 2.700 | 53,802 | |
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| ACTUAL | 2015 | 16,972 | 89 | 6,430 | 72.3 | 0 | 23,402 | 2.531 | 59,233 | ACTUAL |
| PROJECTED | 2016 | 17,026 | 90 | 6,541 | 72.3 | 0 | 23,567 | 2.531 | 59,651 | PROJECTED |
| \| | 2017 | 17,081 | 92 | 6,653 | 72.3 | 0 | 23,734 | 2.531 | 60,074 | \| |
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## Blanusa, Danilo

**From:** Blanusa, Danilo
**Sent:** Thursday, August 20, 2015 9:56 AM
**To:** 'Paul Nagengast (pnagengast@woodsidetown.org)'
**Cc:** Salzano, Tom; Bolzowski, Michael R.; Keck, Jonathan; Smithson, Dawn; Carrasco, Anthony
**Subject:** Cal Water Urban Water Management Plan (UWMP) growth forecast for your review - Bear Gulch District
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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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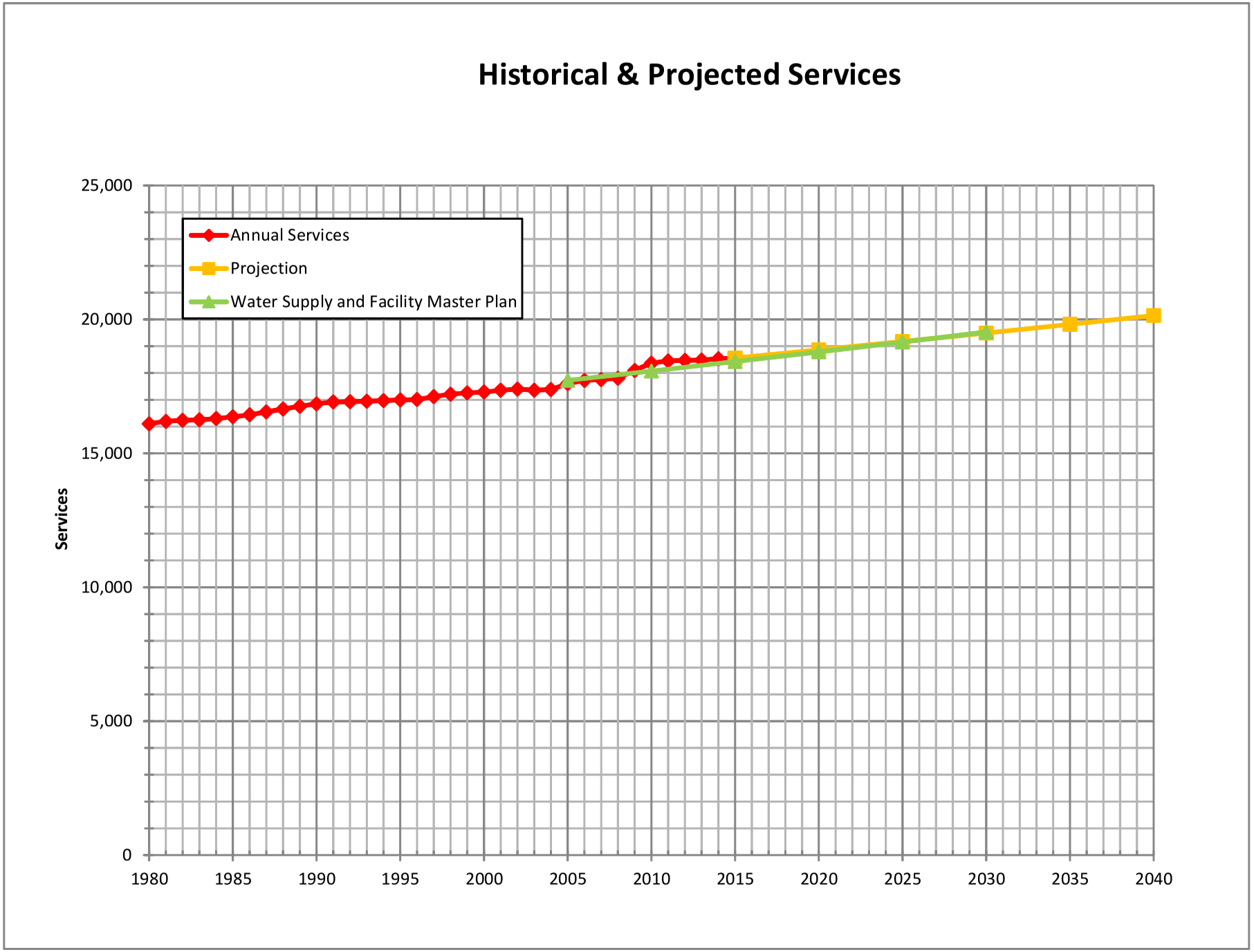

Historical & Projected Services
Annual Services
Projection
Water Supply and Facility Master Plan
Services
25,000
20,000
15,000
10,000
5,000
0
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040

# California Water Service Company - Bear Gulch 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 | 2015 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 |
| SFR | | SFR_B | 5 Yr. Avg. | 0.32% | 15,816 | 16,134 | 16,781 | 16,972 | 16,972 | 17,245 | 17,523 | 17,805 | 18,092 | 18,383 |
| MFR | | MFR_B | 5 Yr. Avg. | 1.72% | 64 | 63 | 75 | 89 | 89 | 97 | 105 | 115 | 125 | 136 |
| COM | | COM_D | 15 Yr. Avg. | 0.36% | 1,276 | 1,284 | 1,365 | 1,346 | 1,346 | 1,371 | 1,396 | 1,422 | 1,448 | 1,474 |
| IND | | IND_A | Zero Growth Rate | 0.00% | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| GOV | | GOV_C | 10 Yr. Avg. | 0.13% | 96 | 95 | 116 | 119 | 119 | 120 | 120 | 121 | 122 | 123 |
| OTH | | OTH_A | Zero Growth Rate | 0.00% | 34 | 30 | 24 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| IRR | | IRR_A | Zero Growth Rate | 0.00% | 0 | 0 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| TOTAL | | Average growth rate 2011-2040 | | 0.33% | 17,288 | 17,607 | 18,369 | 18,555 | 18,555 | 18,861 | 19,174 | 19,492 | 19,815 | 20,145 |

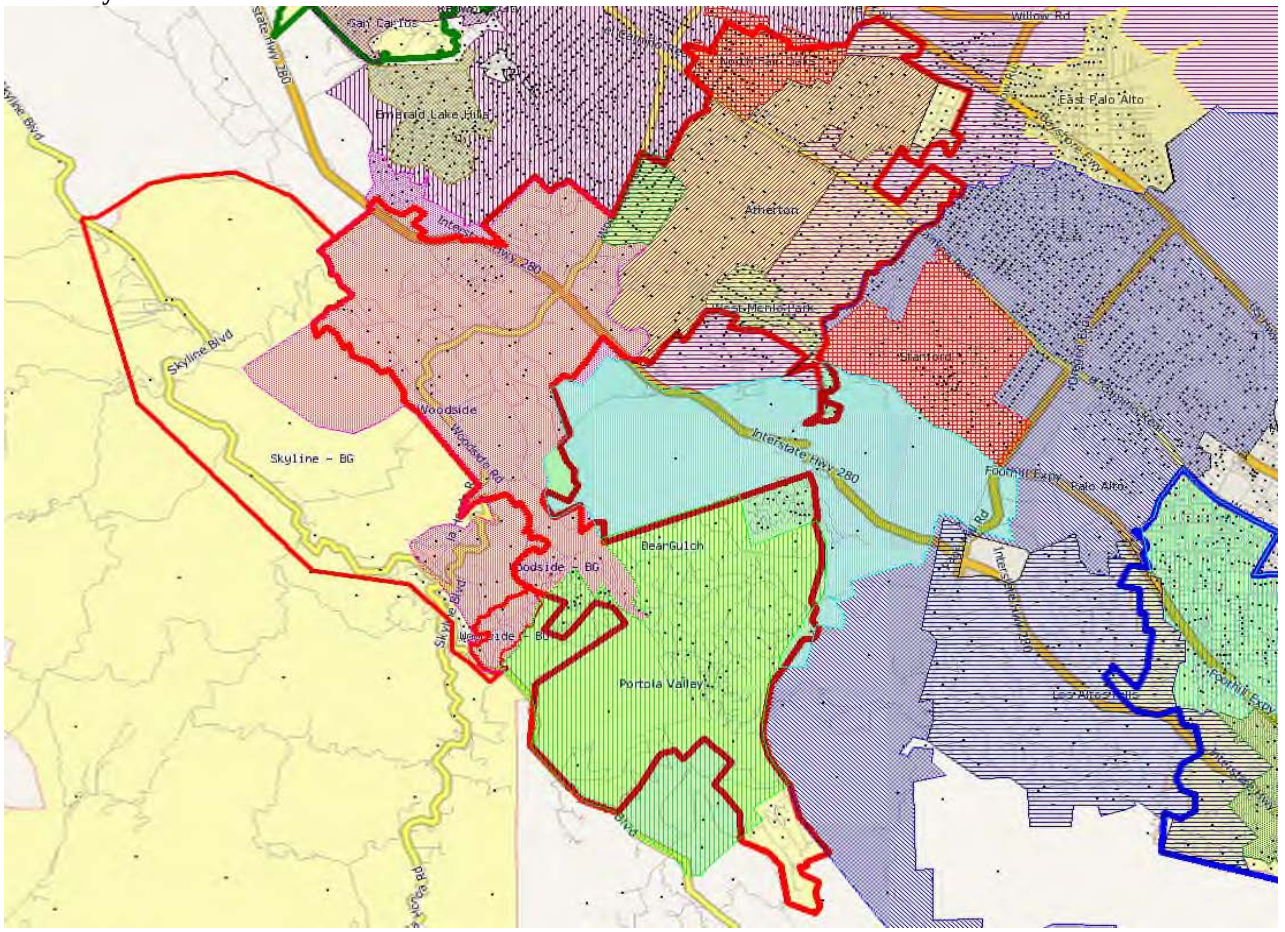
Notes:

# California Water Service Company - Bear Gulch District

Worksheet 12

## Water Supply and Demand Analysis and Projections

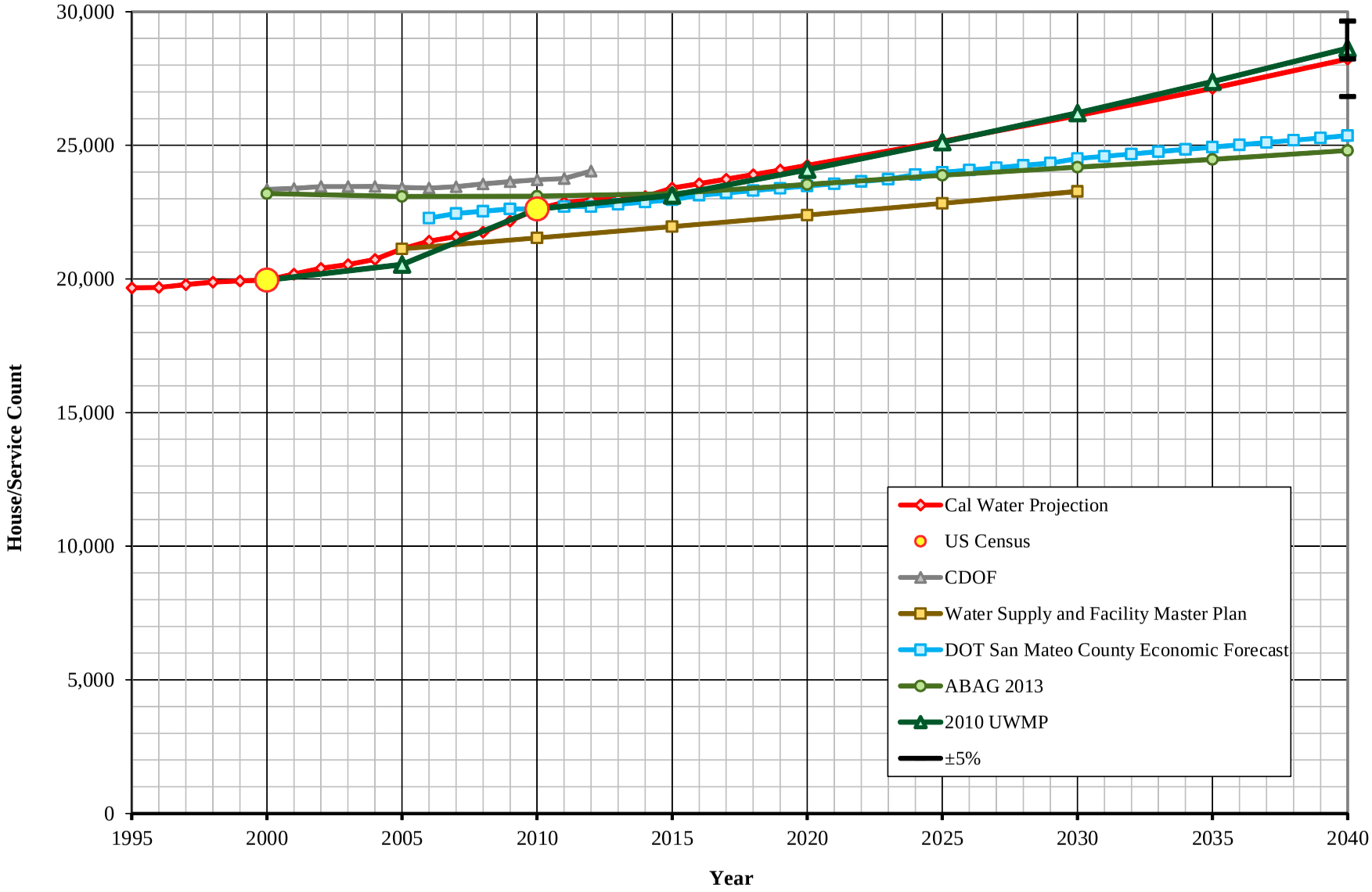
## Marplot Summary



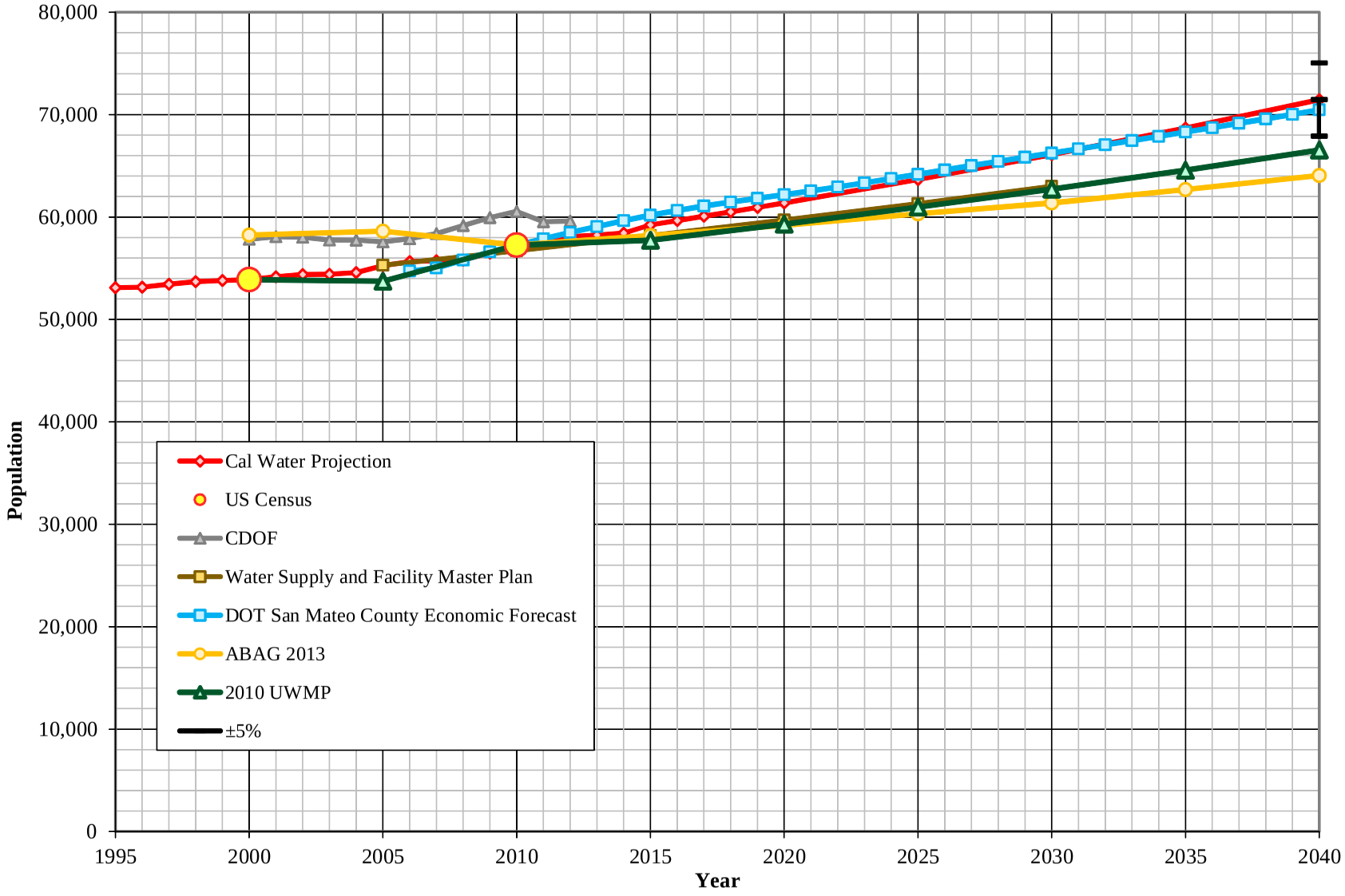

| | US Census 2000 Summary | | | | US Census 2010 Summary | | | | 2000-2010 Change | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System | Census Blocks | Population | Housing Units (HU) | Density | Census Blocks | Population | Housing Units (HU) | Density | Percentage Population Change | Percentage HU Change | Density Change |
| Bear Gulch | | | | | 698 | 55,736 | 21,956 | 2.54 | | | |
| Woodside | | | | | 3 | 183 | 85 | 2.15 | | | |
| Skyline | | | | | 45 | 1,335 | 579 | 2.31 | | | |
| Bear Gulch | 1,130 | 53,885 | 19,956 | 2.70 | 746 | 57,254 | 22,620 | 2.53 | 106.3% | 113.3% | 93.7% |

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



# Population Projections



# California Water Service Company - Bear Gulch District

Worksheet 12

## Water Supply and Demand Analysis and Projections

### Population Estimate

| | US Census | | Persons per Housing Unit | Single Family | Multi Family Residential | | | Flat Rate |
|---|---|---|---|---|---|---|---|---|
| | | | | Residential | | Residential | Unit | Residential |
| Year | Population | Housing Units | | Services (DU) | Services | Units (DU) | Density | Services (DU) |
| 2000 | 53,885 | 19,956 | 2.700 | 15,816 | 64 | 4,140 | 64.7 | 0 |
| 2010 | 57,254 | 22,620 | 2.531 | 16,781 | 75 | 5,839 | 77.4 | 0 |
| | 6.3% | 13.3% | -6.3% | 6.1% | 17.8% | 41.0% | 19.7% | 0.0% |

| | Year | Single Family Residential Services (DU) | Multi Family Residential Services | Multi Family Residential Units (DU) | Multi Family Residential Unit Density | Flat Rate Residential Services (DU) | Total Residential Dwelling Units | Persons per Housing Unit | Estimated District Population | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1995 | 15,532 | 64 | 4,135 | 64.7 | 0 | 19,667 | 2.700 | 53,104 | |
| | 1996 | 15,543 | 64 | 4,140 | 64.7 | 0 | 19,683 | 2.700 | 53,149 | |
| | 1997 | 15,650 | 64 | 4,140 | 64.7 | 0 | 19,790 | 2.700 | 53,437 | |
| | 1998 | 15,743 | 64 | 4,140 | 64.7 | 0 | 19,884 | 2.700 | 53,690 | |
| | 1999 | 15,785 | 64 | 4,140 | 64.7 | 0 | 19,925 | 2.700 | 53,802 | |
| | 2000 | 15,816 | 64 | 4,140 | 64.7 | 0 | 19,956 | 2.700 | 53,885 | |
| | 2001 | 15,875 | 64 | 4,310 | 67.3 | 0 | 20,185 | 2.683 | 54,162 | |
| | 2002 | 15,919 | 64 | 4,480 | 70.0 | 0 | 20,399 | 2.666 | 54,392 | |
| | 2003 | 15,890 | 64 | 4,650 | 72.7 | 0 | 20,540 | 2.649 | 54,421 | |
| | 2004 | 15,910 | 64 | 4,820 | 75.3 | 0 | 20,730 | 2.633 | 54,574 | |
| | 2005 | 16,134 | 63 | 4,990 | 78.7 | 0 | 21,124 | 2.616 | 55,252 | |
| | 2006 | 16,255 | 63 | 5,160 | 82.1 | 0 | 21,415 | 2.599 | 55,651 | |
| | 2007 | 16,260 | 63 | 5,330 | 84.8 | 0 | 21,590 | 2.582 | 55,741 | |
| | 2008 | 16,252 | 70 | 5,499 | 78.3 | 0 | 21,751 | 2.565 | 55,791 | |
| | 2009 | 16,498 | 76 | 5,669 | 75.0 | 0 | 22,168 | 2.548 | 56,484 | |
| | 2010 | 16,781 | 75 | 5,839 | 77.4 | 0 | 22,620 | 2.531 | 57,254 | |
| | 2011 | 16,857 | 83 | 6,009 | 72.3 | 0 | 22,866 | 2.531 | 57,876 | |
| | 2012 | 16,884 | 84 | 6,069 | 72.3 | 0 | 22,954 | 2.531 | 58,098 | |
| ^ | 2013 | 16,887 | 85 | 6,124 | 72.3 | 0 | 23,010 | 2.531 | 58,242 | ^ |
| \| | 2014 | 16,944 | 85 | 6,142 | 72.3 | 0 | 23,085 | 2.531 | 58,432 | \| |
| ACTUAL | 2015 | 16,972 | 89 | 6,430 | 72.3 | 0 | 23,402 | 2.531 | 59,233 | ACTUAL |
| PROJECTED | 2016 | 17,026 | 90 | 6,541 | 72.3 | 0 | 23,567 | 2.531 | 59,651 | PROJECTED |
| \| | 2017 | 17,081 | 92 | 6,653 | 72.3 | 0 | 23,734 | 2.531 | 60,074 | \| |
| v | 2018 | 17,135 | 94 | 6,768 | 72.3 | 0 | 23,903 | 2.531 | 60,502 | v |
| | 2019 | 17,190 | 95 | 6,884 | 72.3 | 0 | 24,074 | 2.531 | 60,935 | |
| | 2020 | 17,245 | 97 | 7,002 | 72.3 | 0 | 24,248 | 2.531 | 61,374 | |
| | 2025 | 17,523 | 105 | 7,626 | 72.3 | 0 | 25,149 | 2.531 | 63,654 | |
| | 2030 | 17,805 | 115 | 8,304 | 72.3 | 0 | 26,110 | 2.531 | 66,087 | |
| | 2035 | 18,092 | 125 | 9,044 | 72.3 | 0 | 27,135 | 2.531 | 68,683 | |
| | 2040 | 18,383 | 136 | 9,849 | 72.3 | 0 | 28,232 | 2.531 | 71,458 | |

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.

# Appendix C: Correspondences

- UWMP Public Draft Comments

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