2014 COMPREHENSIVE WATER RESOURCES REPORT

Final Report

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EXECUTIVE SUMMARY

PREVIOUS COUNCIL ACTION

On March 4, 2013, Council received the Draft 2013 Comprehensive Water Resources Report and directed the City Manager, Ventura Water and Community Development to work together to develop a short term balance of water supply and demand; a predictable use of data to serve pending and projected development over the next 5 years; provide a recommendation for long term water supply and demand policy; and return to Council in May with the final report.

On June 3, 2013 the City Council approved the 2013 Comprehensive Water Resources Report. In addition to approving the report the City Council directed staff to provide an annual update on the City's projected water supply and demand; and to use the local water land use demand factors for the evaluation of all development and the standardized "Water Demand Impact Summary" matrix to quantify the water supply demand of each individual project and the cumulative water supply demand of all approved projects.

2014 CWRR UPDATES

Understanding and monitoring our water supply and demand is essential to planning for and managing a stable and reliable water system to support our community and economic growth. The City's supply and demand plays an important role and dramatically influences the planning for, development of and investment of significant dollars in capital improvements, maintaining our current water supply and investing in new water supplies. Council approved the 2013 Comprehensive Water Resources Report (2013 CWRR) in June 2013 and directed staff to provide an annual update on the City's projected water supply and demand.

Below is Table ES-1, a summary of the most current and best information available on our water supply and demand.

Table ES-1

Summary of Water Supply and Demand

Projected	2015 Drought (AFY)	2015 (AFY)	2020 (AFY)	2025 (AFY)
Supply	14,824 – 16,824	19,535 – 20,935	19,684 – 23,584	20,384 – 24,284
Demand*	17,660	17,660	18,428	18,428
Available Supply	**(2,836) – (836)**	**1,875 – 3,275**	**1,256 – 5,156**	**1,956 – 5,856**

Demand equals baseline 5 year average (17,343 AF) plus the estimated demand from 350 units built annually from the approved projects list for future years.

As shown in the table above, the projected 2015 drought water supply numbers are less than the projected water demand numbers. This indicates that if the current drought condition continues, the City will need to go into mandatory conservation measures and/or pay penalties for overuse of the City's water supply sources.

Changes from the 2013 CWRR to the 2014 CWRR are summarized below.

Baseline Demand

The baseline water demand of 17,601 acre feet (AF) in the 2013 CWRR was established utilizing the previous 5-year City annual average. Utilizing the same criteria, the baseline water demand for the 2014 CWRR is 17,343 AF, a decrease of approximately 260 AF. This decrease can mainly be attributed to a low calendar year 2013 water demand that decreases the 5-year average, the prolonged economic downturn, and increased water rates.

Supply

The 2013 CWRR water supply numbers were revised in the 2014 CWRR to reflect changes to the City's existing supply sources that have come up over the past year including the current drought condition and the projection of the drought through 2015. The water supply source revisions are due to the following water supply issues:

- Casitas: A reduction in the amount of available water from Lake Casitas due to the current drought. Lake Casitas is currently below 60% capacity and is anticipated to reach 50% by this

fall. Once Lake Casitas reaches 50% capacity, Casitas is anticipated to require a cutback in the City's supply. We have included an anticipated required reduction of 10% to our Casitas supply for the projection of the current drought through 2015.

- Ventura River/Foster Park: Due to the continued drought conditions, the City's ability to draw water from the Ventura River has been significantly impacted. We have included a lower range to reflect the minimum supply anticipated from the Ventura River for the projection of the current drought through 2015.

- Oxnard Plain Groundwater Basin (Fox Canyon Aquifer): After several special meetings in the past two months and several iterations of an emergency ordinance, the Fox Canyon Groundwater Management Agency (FCGMA) Board approved Emergency Ordinance E at a Special Meeting on April 11, 2014. The emergency ordinance limits extractions from groundwater extraction facilities within the FCGMA boundary, suspends use of credits and prohibits the construction of any groundwater extraction facilities and/or the issuance of any groundwater extraction facilities permit. By January 1, 2016, the City will be restricted to 305 AF less (3,799 AF) than the City's current allocation of 4,104 AF and during the duration of the ordinance the City will pay surcharges for exceeding because the City may not rely on its conservation credits that were set aside during wet years.

- Santa Paula Groundwater Basin (Santa Paula Basin): The low range has been increased from zero to the current reliable water supply of 1,600 acre feet based on recent agreements and studies underway. In addition, the City recently acquired 5.8 acre feet of groundwater rights in the Santa Paula Basin from the past development of Tract 4632.

RECOMMENDATIONS

The results of this Report indicate that the spread between the current water demand and the current water supply is very tight, and if the drought continues the supply could be less than the demand. This presents significant challenges for the City moving forward in the ability to allocate water supply to development projects that will generate additional water demands. The recommendations for the City moving forward include:

1. Track the total water consumption on an annual basis.
2. Re-calculate the 3-year, 5-year and 10-year water consumption averages on an annual basis.

3. Update the water supply portfolio on an annual basis.
4. Update the existing land use data on an annual basis. This can be done through a system that tracks the development projects as the transition from “Under Construction” to “Existing,” and “Approved” to “Under Construction.”
5. All future development projects should be evaluated based on current supply and demand conditions.
6. Consider adding a new project type in the land use tracking spreadsheet for approved projects under CIP or other City approval processes.
7. Use the City-specific water usage factors to calculate the water demand of all development projects as the projects proceed through the City process prior to approval.
8. Continue to develop water supply through demand side management, securing water rights, establishing an in-lieu fee ordinance and continue to integrate the new water supply sources into the City’s water supply portfolio.

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Demand Factors from Other Agencies

LAFCo 13-01S Sphere of Influence Report

2005 General Plan Tables & Figures

2005 General Plan FEIR Tables

2010 UWMP Tables

2011 Water Master Plan Tables

LAFCo MSR Report

2005 General Plan FEIR Water Demand Factors (email correspondence)

2005-2012 Built Projects – Background Data

1. INTRODUCTION

A. INTRODUCTION

In 2013, Ventura Water initiated the development of an annual water management tool entitled the Comprehensive Water Resources Report (CWRR). The CWRR is intended to be a tool in the development review process as it pertains to water supply and demand. The CWRR is intended to provide an annual look at the City's water demand trends, current water demands, demand projections, and the current and future supply picture. The 2013 CWRR was approved by City Council in June 2013.

The 2013 CWRR was the first annual version of this report; therefore, the 2013 CWRR included more historical information related to the genesis of this report and previous studies prepared. This document, the 2014 CWRR, is intended to be a supplement to the previous year's document. Any information provided in the 2013 CWRR that has not changed will not be included in the 2014 CWRR. The intent of the 2014 CWRR is to provide updated water demand data based on the previous calendar year's data (2013) being available and an update on the City's future water supply portfolio based on the best available information regarding the City's existing and potential future supply sources. The water demand figures will be modified on an annual basis in order to capture the current water use patterns within the City.

It should be noted that the water demand factors calculated in the 2013 CWRR <u>will not</u> be updated on annual basis. If it is recommended, the water demand factors will be re-visited every ten (10) years, unless there is a significant change in the year-over-year annual demand (quantified as a 30% change in two-year period).

The 2014 CWRR will maintain the same outline as the 2013 CWRR. For any sections, tables or exhibits where data has changed, a revised section, table or exhibit will be provided herein. If there are no changes to the section, table or exhibit, it will be noted with "*No changes from the 2013 CWRR.*"

B. PURPOSE OF REPORT

No changes from the 2013 CWRR.

C. STUDY AREA

No changes from the 2013 CWRR.

EXHIBIT 1-1: *No changes from the 2013 CWRR.*

D. DOCUMENT COMPARISON

No changes from the 2013 CWRR

E. DEMAND FACTOR COMPARISON (from previous documents)

No changes from the 2013 CWRR

TABLE 1-1: *No changes from the 2013 CWRR.*

TABLE 1-2: *No changes from the 2013 CWRR.*

TABLE 1-3: *No changes from the 2013 CWRR.*

F. CURRENT PLANNING DATA

The City Planning Department provided actual development data ("Built" projects) for the year 2013, and data on all projects that are under construction or have received all planning approvals ("Approved" projects) for development, as of December 31, 2013. This report will consider the estimated water demand impacts of those projects that are under construction or have received all planning approvals. Projects listed in the Pending Project database that had not received all approvals from the City as of December 31, 2013 were not considered in the future water demand projections for this Report.

G. 2012 LAFCo MUNICIPAL SERVICE REVIEW

No changes from the 2013 CWRR

H. REFERENCE DOCUMENTS

The following documents were referenced in the 2013 CWRR:

- 2004 Biennial Water Supply Report
- 2005 Ventura General Plan (August 2005), City of San Buenaventura
- 2005 Ventura General Plan Final EIR, Volumes I and II (August 2005), City of San Buenaventura
- 2007 General Plan FEIR Supplement
- 2010 Urban Water Management Plan (June 2011), Kennedy/Jenks Consultants
- Water Master Plan (March 2011), RBF Consulting
- Municipal Service Reviews for Nine Ventura County Cities (November 14, 2012), Ventura Local Agency Formation Commission (LAFCo)

Specific excerpts and data sources from the following documents were used in preparation of the 2013 CWRR and included in the Appendix of the 2013 CWRR, as follows:

- Demand Factors from Other Agencies
- LAFCo 13-01S Sphere of Influence Report
- 2005 General Plan Tables & Figures
- 2005 General Plan FEIR Tables
- 2010 UWMP Tables
- 2011 Water Master Plan Tables
- 2012 LAFCo MSR Report
- 2005 General Plan FEIR Water Demand Factors (email correspondence)
- 2005-2012 Built Projects – Background Data

The following list of references is in addition to the references listed above and was used in the preparation of 2013 CWRR and/or used in the preparation of the 2014 CWRR:

- Amended and Restated Judgment Entered August 24, 2010: Original Judgment Entered March 7, 1996 - Santa Paula Groundwater Basin
- Technical Memorandum, City of San Buenaventura Recycled Water Market Assessment by Kennedy/Jenks Consultants for the City of Ventura, dated April 18, 2007
- Feasibility Study on the Reuse of Ojai Valley Sanitary District Effluent- Final Facilities Planning Report by Nautilus Environmental, et al for the City of Ventura, dated Sept. 21, 2007
- “Desalination With a Grain of Salt – A California Perspective”, Pacific Institute, 2006

- "Key Issues of Desalination in California: Cost and Financing", Pacific Institute – Heather Cooley and Newsha Ajami, November 2012
- Treatment Wetlands Feasibility Study Final Report by Carollo Engineers and Stillwater Sciences for City of Ventura, dated March 2010
- Groundwater Treatment Study Final Report by AECOM for the City of Ventura, dated March 2011
- Estuary Subwatershed Study Assessment of the Physical and Biological Condition of the Santa Clara River Estuary, Ventura County, California – Amended Final Report by Stillwater Sciences for the City of Ventura, dated September 2011
- City of Ventura Water Efficiency Ethics Plan – Ventura Water, Sept. 2011
- Estuary Special Studies Phase 2: Facilities Planning Study for Expanding Recycled Water Delivery Final Report by Carollo for the City of Ventura, dated March 2013
- Fox Canyon Groundwater Management Agency (FCGMA) Emergency Ordinance – E, Adopted by the FCGMA Board on April 11, 2014

2. LAND USE

A. EXISTING LAND USE

For the purposes of this Report, the "existing" land use picture is considered the year-end of 2013. In order to determine the existing land use make-up within the City's water service area as of year-end 2013, all known development projects constructed and utilizing water within Calendar Year 2013 were added to the land use data published in the 2013 CWRR for the year-end 2012. An updated Table 2-3 provides a summarized total of the existing (year-end 2013) land use within the City service area.

Table 2-1: *No changes from the 2013 CWRR*
Exhibit 2-1: *No changes from the 2013 CWRR*
Table 2-2: *No changes from the 2013 CWRR*

Table 2-3
Summary of Existing Land Use - December 2013

	Residential Single-Family (units)	Residential Multi-Family (units)	Non-Residential (sf)
Existing (as of 2005 General Plan) [1]	22,034	17,142	15,923,154
Constructed (Built Projects 2005 - 2012) [2]	543	1,369	1,394,442
Constructed (Built Projects 2013) [3]	28	0	4,356
Total Existing Land Use (through 2013)	**22,605**	**18,511**	**17,321,952**

[1] Per Table 2-1

[2] Per Table 2-2

[3] Per data provided by Ventura Water, Built Projects part of CY 2013 water demand (Aldea Hermosa, 28 SFDU and Ckick-Fil-A, 4,356 SF).

B. FUTURE LAND USE

The City maintains a database of projects that are in a phase of the planning process. The database includes all projects from those that are in the conceptual phase to those that are in construction. For the purposes of this Report, the priority was to determine those projects that the City has made commitments to, and to determine the water resources required to meet the anticipated water demand of the projects.

1. Under Construction and Approved Projects

The City Planning Department provided a listing of all the development projects within the City that are "In Planning Process," "In Plan Check," "Under Construction," or have "All Planning Approvals." The list was narrowed down to those projects that are either "Under Construction," or have "All Planning Approvals." Some modifications and adjustments were made based on review and data provided by Ventura Water and City Planning staff. The Under Construction and Approved Projects as of December 31, 2013 are shown on an updated Table 2-4. Table 2-4 provides specific data about each project, including the project number, type, name, status, description and land use details. The table also identifies if the project is located within the boundary of the Casitas Municipal Water District. Exhibit 2-2 identifies the location of each Project that is "Under Construction" or has "All Planning Approvals."

2. Future Potential (per 2005 General Plan)

Table 3-2 of the 2005 General Plan identifies the predicted development intensity and pattern that was anticipated to occur within the General Plan boundary through the planning horizon of year 2025. As mentioned previously, the City provided information as to the development areas that have been constructed, are currently under construction, or are approved for development since the 2005 General Plan through the end of year 2012. Table 2-5 provides a summary of the 2005 General Plan predicted development, a summary of the projects constructed from 2005-2013, a summary of the projects that are under construction or approved, and calculates the remaining developable land through the 2025 planning horizon. It should be noted that the residential unit count is not divided up by the density.

Table 2-4
Summary of Approved and Under Construction Projects - December 2013

						Non-Residential									Residential			
Project ID	**Project Type**	**Project Name**	**Project Status**	**Located in Casitas Municipal Water District (Y or N)**	**Description of Project**	**Commercial (SF)**	**Hotel (SF)**	**Industrial (SF)**	**Institutional (SF)**	**Office (SF)**	**Total (SF)**	**Hospital (beds)**	**Hotel (Rooms)**	**Park (ac)**	**Single-Family (Units)**	**Multi-Family (Units)**	**Total (Units)**	**Area (ac)**
PROJ-00687	Mixed Use	VILLA SAN CLEMENTE - STAJEN (Previously Café Scoop)	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	4,873	0	0	0	0	4,873	0	0			10	10	0.5
PROJ-00756	Mixed Use	ANASTASI DEV.	All Planning Approvals	NO	Mixed Use - Commercial/Residential	20,230	0	0	0	0	20,230	0	0			138	138	5.6
PROJ-01181	Institutional	HARRY LYONS SCHOOL (Westside Pool)	All Planning Approvals	YES	Public pool & aquatic center	0	0	0	5,960	0	5,960	0	0				0	1.3
PROJ-01520	Mixed Use	V2V VENTURES (1570 E. Thompson)	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	2,500	0	0	0	0	2,500	0	0			29	29	1.1
PROJ-02225	Mixed Use	CENTRAL COAST INVESTORS	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	4,500	0	0	0	0	4,500	0	0			43	43	1.1
PROJ-03198	Residential	REXFORD	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0			25	25	0.5
PROJ-6355	Residential	CITY VENTURES, ORCHARD COLLECTION (formally Citrus Pla	All Planning Approvals	NO	59 Single Family Residences; 60 Townhouses	0	0	0	0	0	0	0	0		59	60	119	9.4
PROJ-03614	Mixed Use	V2V VENTURES (300 E. Santa Clara)	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	6,175	0	0	0	0	6,175	0	0			34	34	0.3
PROJ-03617	Industrial	FPA LAND DEV/VICTORIA CORP C	All Planning Approvals	NO	8 industrial office buildings	0	0	234,200	0	0	234,200	0	0				0	11.9
PROJ-03676	Mixed Use	PALM & POLI ASSOC	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	1,200	0	0	0	0	1,200	0	0			16	16	0.4
PROJ-03743 [1]	Mixed Use	CANNERY ROW LLC	Under Construction	YES	Mixed Use - Condominiums/Commercial	2,156	0	0	0	0	2,156	0	0			78	78	1.4
PROJ-03826	Residential	UC HANSEN TRUST SP	All Planning Approvals	NO	131 Single family; 34 Condominiums; 24 farmworker apartments	0	0	0	0	0	0	0	0		131	58	189	35.7
PROJ-03829	Residential	WESTWOOD/PARKLANDS	All Planning Approvals	NO	216 detached homes; 110 attached homes	0	0	0	0	0	0	0	0		216	110	326	58.5
PROJ-03864	Commercial	VOOV	All Planning Approvals	NO	New 2-story office building.	0	0	0	0	6,400	6,400	0	0				0	0.6
PROJ-03865	Residential	MATILIJA	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0			28	28	0.9
PROJ-04110	Residential	RISI	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0			6	6	0.2
PROJ-04154	Residential	CENTEX	All Planning Approvals	YES	120 Single Family Residence, 36 Condominiums	0	0	0	0	0	0	0	0		120	36	156	25.3
PROJ-04182	Mixed Use	NEW URBAN VENTURES	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	1,779	0	0	0	0	1,779	0	0			80	80	2.7
PROJ-04263	Residential	SANTA CLARA ST URBAN RENEWAL	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0			21	21	0.4
PROJ-04282 [1]	Commercial	GHITTERMAN (Victoria - Jindel Dental Group)	Under Construction	NO	New 2 story office building. 1900 Victoria	0	0	0	0	4,829	4,829	0	0				0	0.2
PROJ-6187	Mixed Use	CASTILLO DEL SOL (Previously Main/Central)	All Planning Approvals	YES	40 Multi-Family (Housing Authority)	2,500	0	0	0	0	2,500	0	0			40	40	0.6
PROJ-04296	Residential	GOLDBERG	All Planning Approvals	YES	5 Condominiums	0	0	0	0	0	0	0	0			5	5	0.2
PROJ-04315	Residential	MATLIJA INVESTMENT GROUP (11 S. Ash)	All Planning Approvals	YES	15 Condonimiums	0	0	0	0	0	0	0	0			15	15	0.6
PROJ-6273	Mixed Use	SONDERMANN-RING/VTA HARBOR	All Planning Approvals	NO	300 apartments; 21,000 sq ft commercial/retail/office; private indoor/outdoor rec facilities incl 2.44 acre park and waterfront promenade	21,000	0	0	0	0	21,000	0	0	2		300	300	26.9
PROJ-04543	Mixed Use	RENAISSANCE HOLDINGS	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	3,582	0	0	0	0	3,582	0	0			25	25	0.8
PROJ-04590	Residential	HUGHES	All Planning Approvals	YES	3 Condominiums	0	0	0	0	0	0	0	0			3	3	0.2
PROJ-01857	Residential	JENVEN VILLAGE LLC (Hearthside)	All Planning Approvals	NO	51 Condominiums (was 23,691 sf commercial & 83 condos)	0	0	0	0	0	0	0	0			51	51	3.1
PROJ-04691	Residential	CHAPMAN, MIKE	Under Construction	YES	7 Apartments	0	0	0	0	0	0	0	0			7	7	0.5
PROJ-1126	Residential	HEMLOCK APARTMENTS	All Planning Approvals	YES	23 Apartments	0	0	0	0	0	0	0	0			23	23	0.6
PROJ-1200	Mixed Use	LOGUE FAMILY	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	7,300	0	0	0	0	7,300	0	0			105	105	5.9
PROJ-1678	Institutional	CMH - NEW HOSPITAL	Under Construction	YES	Construction of a hospital building (320,000 sq ft and 230 beds), adaptive resuse of existing hospital facilities (121,000 sq ft for non-essential hospital support services) and 104,000 sq ft for new backfill medical office reuse), new street extensions.	0	0	0	320,000	0	320,000	230	0				0	1.9
PROJ-2008	Residential	ISLAND VIEW APARTMENTS - WESTWOOD COMMUNITIES	All Planning Approvals	NO	Apartment complex	0	0	0	0	0	0	0	0			154	154	3.8
PROJ-2695 [1]	Commercial	CBCFCU	Under Construction	NO	Two story bank	0	0	0	0	7,434	7,434	0	0				0	0.6
PROJ-5616	Commercial	MARRIOT RESIDENCE INN	All Planning Approvals	NO	128 room Residence Inn	0	87,000	0	0	0	87,000	0	128				0	3.7
PROJ-4154	Residential	EAST VILLAGE RESIDENTIAL - CEDC Apartments	All Planning Approvals	NO	Low Income Apartments	0	0	0	0	0	0	0	0			50	50	2.5
PROJ-4222	Residential	PARKLANDS APARTMENTS	All Planning Approvals	NO	Apartments with Community Building	0	0	0	7,115	0	7,115	0	0			173	173	7.1
PROJ-4627	Commercial	VALERO	All Planning Approvals	YES	New automatic carwash and canopy	912	0	0	0	0	912	0	0				0	0.6
PROJ-5211 [2]	Residential	CITRUS APARTMENTS	Under Construction	NO	Apartment Complex						0			0		54	54	
PROJ-5097 [2]	Commercial	ALLIED BEVERAGE COMPANY	Under Construction	NO	134797 sf food beverage distribution	134,797					134,797						0	
Park [3]	Park	VENTURA COMMUNITY PARK SOFTBALL FIELDS	Under Construction	NO	Softball Field						0			5.5			0	
PROJ-4184 [2]	Mixed Use	ENCLAVE PROJECT - WATT Properties	All Planning Approvals	NO	91 Homes						0			3	77	14	91	9.2
PROJ-6576 [3]	Institutional	VENTURA COLLEGE	All Planning Approvals	NO	Demolish Bldg and Construct New Bldg (Net increase of 3,286 sf)				3,286		3,286						0	
TOTAL						**213,504**	**87,000**	**234,200**	**336,361**	**18,663**	**889,728**	**230**	**128**	**10.8**	**603**	**1,791**	**2,394**	**227**

[1] Not part of CY 2013 water consumption (connected to City water, not yet occupied).
[2] Approved projects during CY 2013.
[3] Approved project through CIP or other City approval process as of end of CY 2013.

Table 2-5
Summary of Predicted, Actual and Remaining Development

	Residential Development (units)	Non-Residential				
		Retail (sf)	Office (sf)	Industrial (sf)	Hotel (sf)	Total (sf)
2005 General Plan Prediction [1]	8,318	1,241,377	1,213,214	2,235,133	530,000	5,219,724
Actual Development (Built 2005-2012) [2]	1,912	320,102	320,102	754,239	0	1,394,442
Constructed (Built 2013) [4]	28	4,356	0	0	0	4,356
Remaining Developable Land (as of end 2013)	***6,378***	***916,920***	***893,113***	***1,480,894***	***530,000***	***3,820,926***
Approved & Under Construction Projects [3]	2,394	213,504	18,663	570,561	87,000	889,728
Remaining Developable Land (through 2025)	**3,984**	**703,416**	**874,450**	**910,333**	**443,000**	**2,931,198**

[1] Source: Table 3-2 of 2005 General Plan.

[2] Per Table 2-2. The "Retail/Office" square footage listed in Table 2-2 was split evenly for the purposes of this table.

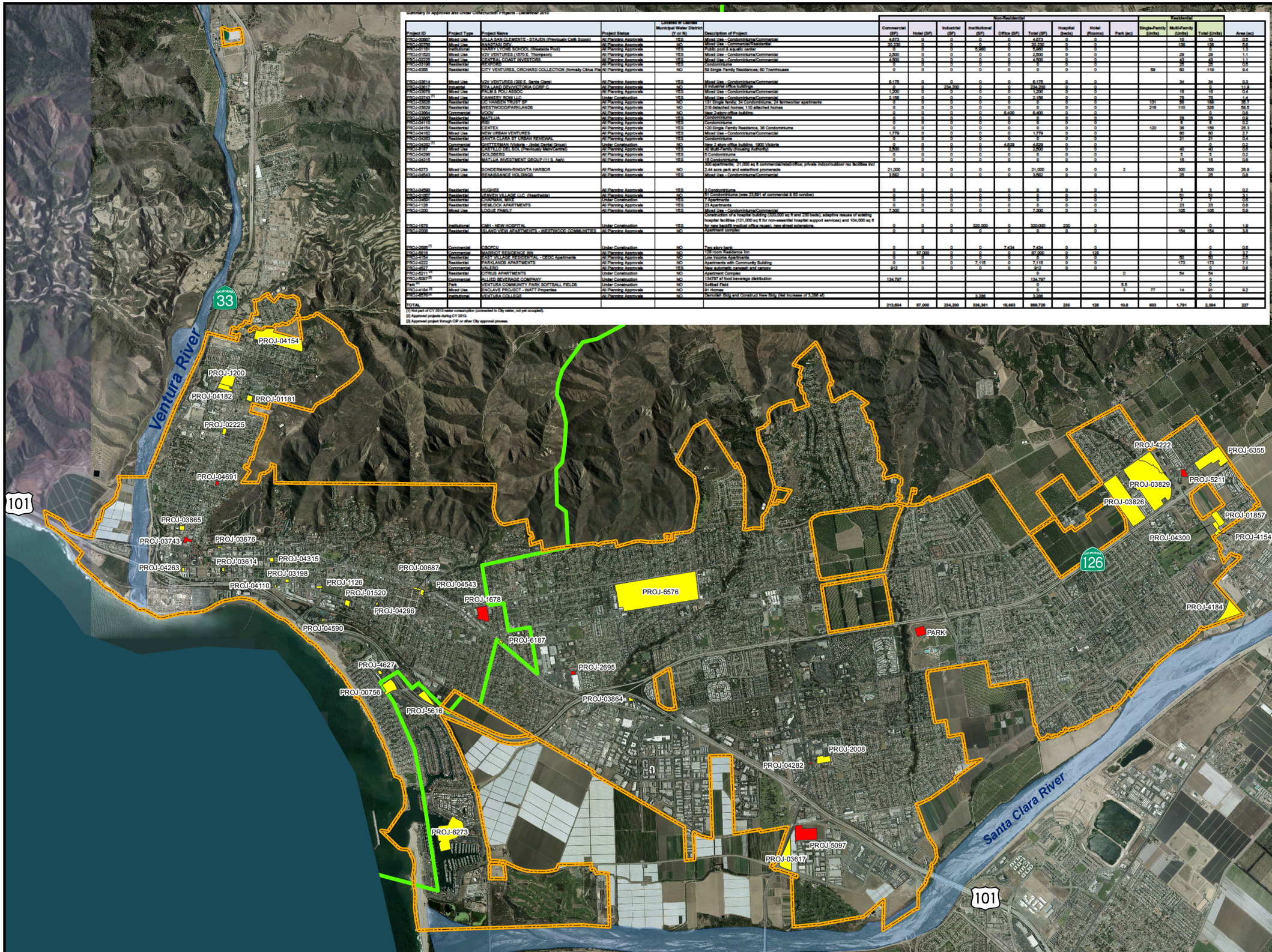
[3] Per Table 2-4. Square footage for the "Institutional" Category was added to the "Industrial" category.

[4] Per Table 2-3.

Summary of Approved and Under Construction Projects - December 2013

Project ID	Project Type	Project Name	Project Status	Located in Ventura Municipal Water District (Y or N)	Description of Project	Non-Residential: Commercial (SF)	Hotel (SF)	Industrial (SF)	Institutional (SF)	Office (SF)	Total (SF)	Hospital (beds)	Hotel (Rooms)	Park (ac)	Residential: Single-Family (Units)	Multi-Family (Units)	Total (Units)	Area (ac)
PROJ-00687	Mixed Use	VILLA SAN CLEMENTE - STAJEN (Previously Calli Scoco)	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	4,673	0	0	0	0	4,673	0	0			10	10	0.5
PROJ-00756	Mixed Use	ANASTASI DEV	All Planning Approvals	NO	Mixed Use - Commercial/Residential	20,230	0	0	0	0	20,230	0	0			138	138	5.6
PROJ-01181	Institutional	FARRIS HIGH SCHOOL (Westside Pool)	All Planning Approvals	YES	Public pool & aquatic center	0	0	0	5,960	0	5,960	0	0			0	0	1.3
PROJ-01520	Mixed Use	VJV VENTURES (1570 E. Thompson)	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	2,500	0	0	0	0	2,500	0	0		29	29	29	1.1
PROJ-01726	Mixed Use	CENTRAL COAST INVESTORS	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	4,500	0	0	0	0	4,500	0	0		43	43	43	1.1
PROJ-01858	Residential	REXPORD	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0		9	9	9	0.5
PROJ-6355	Residential	CITY VENTURES, ORCHARD COLLECTION (formally Citrus Pla	All Planning Approvals	NO	59 Single Family Residences; 60 Townhouses	0	0	0	0	0	0	0	0		59	60	119	9.4
PROJ-03614	Mixed Use	VJV VENTURES (300 E. Santa Clara)	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	6,175	0	0	0	0	6,175	0	0			34	34	0.3
PROJ-03617	Industrial	EPA LAND DEVELOPERS CORP C	All Planning Approvals	NO	8 industrial office buildings	0	0	234,200	0	0	234,200	0	0			0	0	11.9
PROJ-03826	Mixed Use	PALM & POLI ASSOC	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	1,200	0	0	0	0	1,200	0	0			16	16	0.4
PROJ-03743 [1]	Mixed Use	CANNERY ROW LLC	Under Construction	YES	Mixed Use - Condominiums/Commercial	2,156	0	0	0	0	2,156	0	0			78	78	1.4
PROJ-03829	Residential	UC HANDEN TRUST SP	All Planning Approvals	NO	131 Single family; 34 Condominiums; 24 farmworker apartments	0	0	0	0	0	0	0	0		131	58	189	26.1
PROJ-03829	Residential	WESTWOOD/PARKLANDS	All Planning Approvals	NO	216 detached homes; 110 attached homes	0	0	0	0	0	0	0	0		216	110	326	58.5
PROJ-03864	Commercial	VOOV	All Planning Approvals	NO	New 2-story office building	0	0	0	0	6,400	6,400	0	0				0	0.6
PROJ-03865	Residential	MATILUA	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0		28	28	28	0.6
PROJ-04110	Residential	RSI	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0		8	8	8	0.3
PROJ-04154	Residential	CENTEX	All Planning Approvals	YES	120 Single Family Residence, 36 Condominiums	0	0	0	0	0	0	0	0		120	36	156	25.3
PROJ-04182	Mixed Use	NEW URBAN VENTURES	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	1,779	0	0	0	0	1,779	0	0			80	80	2.7
PROJ-04263	Residential	SANTA CLARA BY URBAN RENEWAL	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0			21	21	0.4
PROJ-04282 [1]	Commercial	CHRITTENDEN Victoria - (Hotel Pacific Group)	Under Construction	NO	New 2-story office building, 1900 Victoria	0	0	0	0	4,629	4,629	0	0				0	0.5
PROJ-04691	Residential	CAMPILLO DEL SOL (Previously Mehr/Centre)	All Planning Approvals	YES	40 Multi-Family (Housing Authority)	2,500	0	0	0	0	2,500	0	0			40	40	0.6
PROJ-04296	Residential	GOLDBERG	All Planning Approvals	YES	5 Condominiums	0	0	0	0	0	0	0	0			5	5	0.2
PROJ-04315	Residential	MATILUA INVESTMENT GROUP (11 S. Ash)	All Planning Approvals	YES	15 Condominiums	0	0	0	0	0	0	0	0			15	15	0.6
PROJ-4273	Mixed Use	BONDERMANN-RING/VTA HARBOR	All Planning Approvals	NO	300 apartments; 21,000 sq ft commercial/retail/office; private indoor/outdoor rec facilities incl 2.44 acre park and waterfront promenade	21,000	0	0	0	0	21,000	0	0	2	300	300	300	26.9
PROJ-04543	Mixed Use	BENASSAN/CE HOLDINGS	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	3,503	0	0	0	0	3,503	0	0			25	25	0.8
PROJ-04590	Residential	HUGHES	All Planning Approvals	YES	3 Condominiums	0	0	0	0	0	0	0	0			3	3	0.2
PROJ-01857	Residential	VENVEN VILLAGE LLC (Heathfield)	All Planning Approvals	NO	51 Condominiums (was 23,891 sf commercial & 83 condos)	0	0	0	0	0	0	0	0			51	51	3.1
PROJ-04691	Residential	CHAPMAN, MIKE	Under Construction	YES	7 Apartments	0	0	0	0	0	0	0	0			7	7	0.5
PROJ-1126	Residential	HEMLOCK APARTMENTS	All Planning Approvals	YES	23 Apartments	0	0	0	0	0	0	0	0			23	23	0.6
PROJ-1200	Mixed Use	LOGUE FAMILY	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	7,300	0	0	0	0	7,300	0	0			105	105	5.9
PROJ-1678	Institutional	CMH - NEW HOSPITAL	Under Construction	YES	Construction of a hospital building (300,000 sq ft and 200 beds), adaptive reuse of existing hospital facilities (121,000 sq ft for non-essential hospital support services) and 104,000 sq ft for new health medical office (main), new street extensions	0	0	0	320,000	0	320,000	230	0				0	1.9
PROJ-2008	Residential	ISLAND VIEW APARTMENTS - WESTWOOD COMMUNITIES	All Planning Approvals	NO	Apartment complex	0	0	0	0	0	0	0	0			154	154	3.8
PROJ-2695 [1]	Commercial	CROCFUL	Under Construction	NO	Two story bank	0	0	0	0	7,434	7,434	0	0				0	0.6
PROJ-3864	Commercial	MARRIOT RESIDENCE INN	All Planning Approvals	NO	128 room Residence Inn	0	87,000	0	0	0	87,000	0	128				0	3.3
PROJ-4154	Residential	EAST VILLAGE RESIDENTIAL - CEDC Apartments	All Planning Approvals	NO	Low Income Apartments	0	0	0	0	0	0	0	0		50	50	50	2.5
PROJ-4222	Residential	PARKLANDS APARTMENTS	All Planning Approvals	NO	Apartments with Community Building	0	0	0	7,115	0	7,115	0	0			173	173	7.1
PROJ-4627	Commercial	VALERO	All Planning Approvals	YES	New automatic carwash and canopy	812	0	0	0	0	812	0	0				0	0.6
PROJ-5211 [2]	Residential	CITRUS APARTMENTS	Under Construction	NO	Apartment Complex						0			0		54	54	
PROJ-5097 [3]	Commercial	ALLIED BEVERAGE COMPANY	Under Construction	NO	134797 sf food beverage distribution	134,797					134,797						0	
Park [4]	NO	VENTURA COMMUNITY PARK SOFTBALL FIELDS	Under Construction	NO	Softball Field						0			5.5			0	
PROJ-4184 [2]	Mixed Use	ENCLAVE PROJECT - WATT Properties	All Planning Approvals	NO	91 Homes						0			3	77	14	91	9.2
PROJ-6576 [2]	Institutional	VENTURA COLLEGE	All Planning Approvals	NO	Demolish Bldg and Construct New Bldg (Net increase of 3,296 sf)				3,296		3,296						0	
TOTAL						213,604	87,000	234,200	336,361	18,663	889,728	230	128	10.5	603	1,791	2,394	227

[1] Not part of CY 2013 water consumption (connected to City water, not yet occupied).
[2] Approved projects during CY 2013.
[3] Approved project through CIP or other City approval process.



VENTURA WATER

Pending Projects Approved and Under Construction
(as of December 2013)

Legend

Ventura City Limit

Project Status

All Planning Approvals

Under Construction

0 0.5 1
Miles

Source: Ventura County Data, Eagle Aerial, 2010 Esri World Imagery

RBF CONSULTING A Baker Company

Exhibit 2-2

5/2/2014 JN M:\Mdata\10104392\EX2_2_Pending_Projects_2013_L11x17.mxd DER

3. WATER DEMANDS

A. EXISTING DEMAND CONDITION

Ventura Water staff provided a summary of the meter consumption data for the entire service area for the calendar years (CY) 2004 - 2013 (Historical Water Consumption). Table 3-1 summarizes the total water consumption for each consumption category within the City's water service area for the most recent complete year of data, CY 2013. As shown in Table 3-1, the total water consumption for CY 2013 was 17,723 AFY (including the 6.5% water loss factor), down slightly from CY 2012. This decrease can mainly be attributed to a low CY 2013 water demand that decreases the five-year average, the prolonged economic downturn and increased water rates. The annual water consumption figures for the past ten years are provided in subsection 3.D.

Table 3-1

Summary of Existing Water Consumption for CY 2013

City Consumption Category	Water Consumption (HCF) [1]	Water Consumption (gpm)	Water Consumption (gpd)	Water Consumption (AFY)	Water Consumption + 6.5% Loss (AFY)
Single Family	3,157,097	4,492.98	6,469,886	7,248	7,719
Multi Family	1,618,364	2,303.15	3,316,538	3,715	3,957
Commercial/Retail/Industrial/Hotel	1,459,099	2,076.50	2,990,154	3,350	3,567
Public/Institutional (Municipal/Church/School)	271,867	386.90	557,141	624	665
Hospitals	84,904	120.83	173,995	195	208
Parks/Landscape/Irrigation	430,949	613.30	883,150	989	1,054
Other [2]	226,613	322.50	464,401	520	554
Total	**7,248,893**	**10,316.16**	**14,855,266**	**16,641**	**17,723**

[1] Source: HCF Consumption Data Tables (CY 2013) provided by Ventura Water.

[2] "Other" category includes all other accounted-for water such as construction water, water/sewer system maintenance, measured leakage. In addition, this includes 'grandfathered' users with water entitlements requiring special service conditions and oil industry use.

B. CONSUMPTION AND USAGE FACTORS

No changes from the 2013 CWRR.

Table 3-2: *No changes from the 2013 CWRR.*

Table 3-3: *No changes from the 2013 CWRR.*

C. USAGE FACTOR COMPARISON

No changes from the 2013 CWRR.

Table 3-4: *No changes from the 2013 CWRR.*

D. HISTORICAL WATER CONSUMPTION (BASELINE DEMAND CONDITION)

To calculate the total near-term water demand, the projected demands must be added to a baseline demand condition. The baseline demand should consider the historical water usage of the entire service area over an extended duration, in order to account for the year-to-year anomalies that can occur. City-wide water demands will vary from year to year based on several factors, including climate, water rates, the local economy, and environmental restrictions among other factors. To determine a recommended baseline, the historical water data was gathered for the past 10-year period. Ventura Water staff provided historical water consumption data for CY 2004 through 2013. Table 3-5 provides a summary of the City-wide water consumption for each year from 2004 to 2013. The consumption numbers are also depicted graphically on Figure 3-1.

As noted in the table, the average annual water consumption for Years 2004-2008 (19,403 AFY) was significantly higher than the average annual consumption for Years 2009-2013 (17,343 AFY). The drop in consumption is likely due to several factors, including improvements to the City's distribution system to control water loss, more aggressive water conservation measures, less construction activity, and a weaker economy. Some of the water use reduction trends may revert back to previous habits, however some will remain. With the State's passing of SB x7-7, all agencies are required to maintain a reduced urban water use target. This bill will result in water municipalities maintaining aggressive water conservation programs.

The historical data was used to develop the baseline demand condition, which is identified in Table 3-5. The City experienced a steady decline in total water consumption from its' peak year of 2007 (19,931 AFY) to the low year of 2011 (16,550 AFY). Over the most recent 5-year period, the average annual water consumption was 17,343 AFY, with the lowest year approximately 4.6% lower than the average and the highest year approximately 14.9% above the average. Over the 10-year period, the average annual water consumption was 18,373 AFY, with the lowest year approximately 9.9% lower than the average and the highest year approximately 8.5% above the average.

For the purposes of establishing a baseline average annual water demand for the existing condition, it is recommended to use the 10-year average from the preceding ten years of data to capture the various factors influencing water consumption over the recent period. Due to the prolonged economic downturn, the significant restrictions placed on the imported water supply to southern California, and the recent drought conditions, it was determined that a longer period was necessary to determine the baseline demand condition that is more reflective of a typical demand

year. However, the City has identified a large industrial water user that has been significantly reducing their potable water consumption since the early 2000s. The City expects their reduced dependence on the potable water system to be a permanent condition; therefore the City feels more comfortable using the most recent 5-year average as the baseline demand condition. Therefore, the baseline water demand established for this Report is 17,343 AFY.

Table 3-5
Historical Annual Water Consumption

Calendar Year	Consumption [1] (AFY)	Averages		
		3-year	5-year	10-year
2004	19,773			
2005	18,914			
2006	19,382		*19,403*	
2007	*19,931*			
2008	19,014			18,373
2009	17,871			
2010	16,565			
2011	*16,550*		**17,343**	
2012	18,004	17,426		
2013	17,723			

[1] Provided by Ventura Water. Includes 6.5% water loss factor.

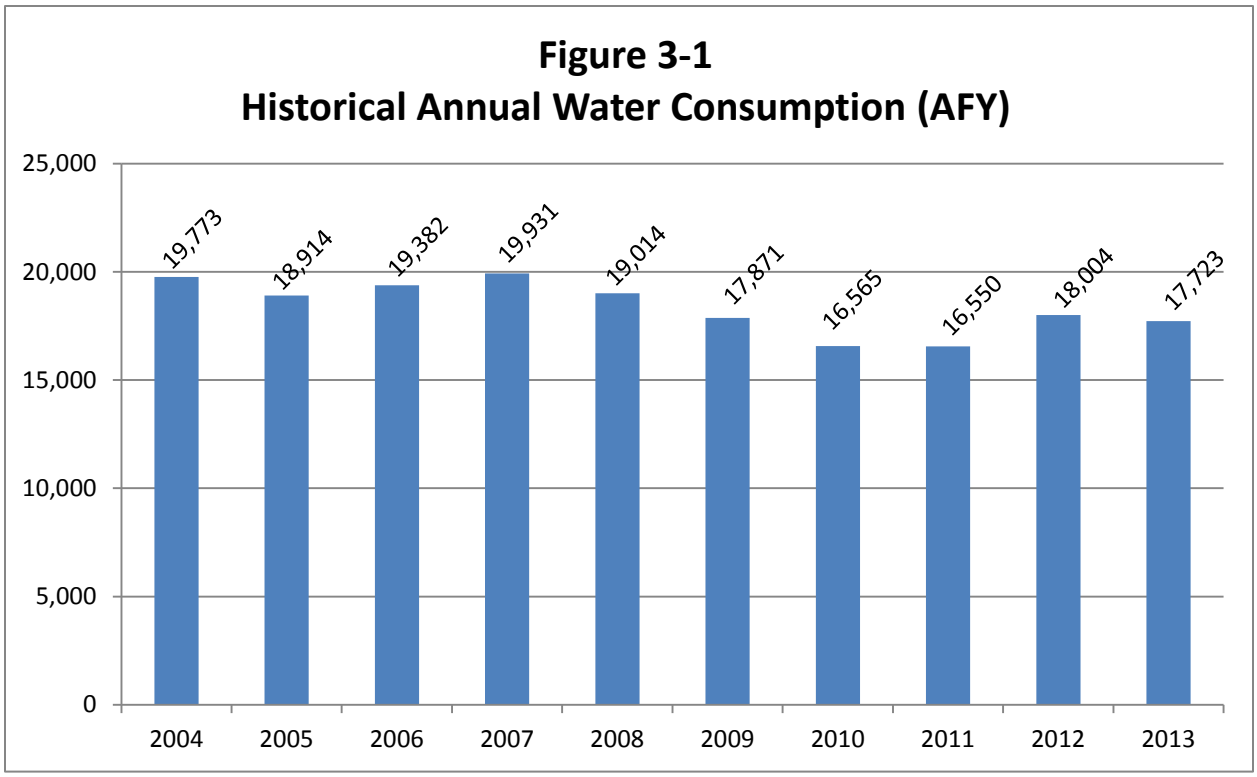


Figure 3-1
Historical Annual Water Consumption (AFY)
25,000
20,000
15,000
10,000
5,000
0
19,773
18,914
19,382
19,931
19,014
17,871
16,565
16,550
18,004
17,723
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013

E. FUTURE DEMAND PROJECTIONS (Approved Projects Only)

This Report will focus only on the near-term demand growth projections. The near-term growth consists of the proposed development projects that have been approved by the City but are not yet connected to the City's water system. This includes projects that are currently under construction, or were under construction in December 2013, and projects that have all City approvals, but have yet to begin construction (Table 2-4).

The future average annual water demand for the near-term growth projects were calculated utilizing the City-specific usage factors calculated above (Table 3-3). The factors were applied to each project in Table 2-4, per the detailed land use breakdown. Table 3-6 summarizes the calculations for the future demand potential. The increased water demand using the City-specific factors is predicted to be 1,085 acre-feet/year (AFY). Table 3-6 also identifies the portion of the near-term demands, 379 AFY, that are predicted to be within the service area of the Casitas Municipal Water District. The projected demands are considered a fully-committed allocation of the water supply.

Under the baseline demand condition, and utilizing the City-specific water usage factors developed herein for the approved development projects, the total near-term water demands are predicted to be 18,428 AFY, as shown on Table 3-7.

In order to estimate the growth of the future water demands, and absorption rate of 350 dwelling units per year (units/year) was utilized (and an equivalent absorption rate for the non-residential development). Based on historical growth data provided by the City, an estimated annual growth of 350 units/year is considered conservative. Assuming the 350 units/year growth rate, the City can expect the projected water demand for the under construction and approved projects to be fully vested by Year 2020, per Table 3-8.

Table 3-6
Total Estimated Demands for Under Construction and Approved Projects

Water Demand Factor Classification	Quantity [1]	Usage Factor [2]	Estimated Average Water Demand		Quantity [4]	Estimated Average Water Demand (within Casitas Boundary)	
Residential (0-8 du/ac)	603 du	370 gpd/du	223,110 gpd	250 AFY	120 du	44,400 gpd	50 AFY
Residential (9-20 du/ac)	1,791 du	250 gpd/du	447,750 gpd	502 AFY	629 du	157,250 gpd	176 AFY
Residential (21+ du/ac)							
Commercial/Retail/Industrial/Hotel Public/Institutional	570 ksf [3]	265 gpd/ksf	150,978 gpd	169 AFY	43 ksf [3]	11,511 gpd	13 AFY
Park/Landscape/Irrigation	10.8 ac	2,000 gpd/ac	21,660 gpd	24 AFY	0 ac	-	-
Hospital/Assisted Living	230 bed	545 gpd/bed	125,350 gpd	140 AFY	230 bed	125,350 gpd	140 AFY
Total			***968,848 gpd***	***1,085 AFY***		***338,511 gpd***	***379 AFY***

[1] Per Table 2-4

[2] Per Table 3-3

[3] Excludes 320,000 SF for the Hospital. Hospital demand calculated "per bed" since an appropriate factor was developed. Includes Hotel SF.

[4] Within Casitas Boundary, per Table 2-4 (included in the total).

Table 3-7
Projected Total Water Demands Including Under Construction and Approved Projects - Various Baselines

Baseline Demand Condition	Baseline Water Demand	Projected Water Demand [1] 1,085 AFY
1-Year: 2013	17,723 AFY	18,808 AFY
3-Year Average: 2011-2013	17,426	18,511
5-Year Average: 2009-2013	**17,343**	**18,428**
10-Year Average: 2004-2013	18,373	19,458
Past 5-Year Period: Annual High Year	18,004	19,089
Past 10-Year Period: Annual High Year	19,931	21,016

[1] Based on Calculated Consumption (Usage) Factors

Table 3-8
Projected Water Demand Growth per Absorption Rate

Year	Total Units [1]	Absorption Rate [2]	Projected Water Demand [3]
2013			***17,343 AFY***
2014		350	17,501
2015		350	17,660
2016		350	17,819
2017		350	17,977
2018		350	18,136
2019		350	18,295
2020		294	18,428
2021			18,428
Totals	**2,394**	2,394	**18,428 AFY**

[1] Per Table 2-4.

[2] Based on City's experience with peak rates of construction activity of approximately 350 units per year. Absorption rate of Commercial, Retail, Industrial, Hotel and Public/Institutional assumed to correlate with the estimated DU absorption rate.

[3] Projections based on Baseline Demand Condition, per Table 3-7.

4. WATER SUPPLY

A. INTRODUCTION

No changes from 2013 CWRR.

Exhibit 4-1: *No changes from the 2013 CWRR.*

B. CURRENT WATER SUPPLY SOURCES

No changes from the 2013 CWRR.

Table 4-1: *No changes from the 2013 CWRR.*

C. FUTURE WATER SUPPLY

1. Casitas Municipal Water District (Casitas)

While additional supply (up to 8,000 AFY) may be available to the City in future years, the present annual supply used within the Casitas district boundary of the City service system is approximately 5,000 AFY.

As discussed in Section 3, and shown on Table 3-6, it is estimated that the added water supply required to meet the demand of the under construction and approved projects that are located within the Casitas boundary is 379 AFY. Therefore, the anticipated future water supply from Casitas will increase by an equivalent amount, to approximately 5,379 AFY, by Year 2020. Using the absorption rate discussed in Section 3, the estimated supply from Casitas is estimated to increase by 111 AFY in year 2015.

Casitas recently stated that there may be some time in the near future that Lake Casitas could be at risk due to continued drought conditions and depletion of the Lake Casitas water supply to minimum pool. Lake Casitas is currently below 60% capacity and is anticipated to reach 50% by this fall. Once Lake Casitas reaches 50% capacity, it is anticipated that Casitas will require a cutback to the City's supply. Casitas is presently reviewing their Drought Program and will likely have some changes and improvement to the Program by this summer. For purposes of this

report an estimated reduction of 10% to the City's Casitas supply has been included for the projection of the current drought through 2015 (2015 Supply Drought Impact).

2. Ventura River Surface Water Intake and Upper Ventura River Groundwater Basin/Subsurface Intake and Wells (Foster Park)

Due to the continued drought conditions, the City's ability to draw water from the Ventura River has been significantly impacted. Therefore, a range is shown in Table 4-2 to reflect the minimum supply anticipated from the Ventura River for the projection of the current drought through 2015 (2015 Supply Drought Impact).

3. Mound Groundwater Basin (Mound Basin)

No changes from the 2013 CWRR.

4. Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)

After several special meetings in the first few months of 2014 and several iterations of an emergency ordinance, the Fox Canyon Groundwater Management Agency (FCGMA) Board approved Emergency Ordinance E at a Special Meeting on April 11, 2014. The emergency ordinance limits extractions from groundwater extraction facilities within the FCGMA boundary, suspends use of credits and prohibits the construction of any groundwater extraction facilities and/or the issuance of any groundwater extraction facilities permit. By January 1, 2016, the City will be restricted to 305 AF less than the City's current allocation of 4,104 AF and during the duration of the ordinance the City will pay surcharges for exceeding because the City may not rely on its conservation credits that were set aside during wet years.

Key points presented by FCGMA for Emergency Ordinance E were as follows:

- The FCGMA Act goal of safe yield by 2010 not being met,
- The 2007 Groundwater Management Plan Basin Management Objectives not being met,
- Water level declines in all basins,
- The unsustainability of the current Agency allocation scheme,
- Increase in time of planted acres of water intensive crops, and

- The continued unabated threats to the resource (seawater intrusion, water quality degradation, land subsidence).

For all Municipal and Industrial (M&I) Operators the Temporary Extraction Allocation (TEA) is based on an operators average annual reported extractions, for CY 2003 through 2012. Phased reductions were set beginning July 1, 2014 with a 20% total reduction of the TEA on January 1, 2016. The City's TEA is 4,749 AFY and with the phased reductions will be 3,799 AFY on January 1, 2016. This equates to a reduction of approximately 31% from the previous historical baseline allocation of 5,472 AFY.

The duration of the ordinance remains in effect from the date of adoption and reviewed every eighteen months, unless superseded or rescinded by action of the FCGMA Board or a finding by the FCGMA Board that the drought or emergency condition no longer exists.

5. Santa Paula Groundwater Basin (Santa Paula Basin)

The low range of this water supply has been increased from zero to the current reliable water supply of 1,600 acre-feet based on recent agreements and studies underway. In addition, the City recently acquired 5.8 acre-feet of water rights in the Santa Paula Basin from the past development of Tract 4632.

6. Recycled Water

No changes from the 2013 CWRR.

The City's projected water supply portfolio is summarized in Table 4-2.

Table 4-2
Summary of Projected Future Water Supply
From Existing Sources

Water Supply Source [1]	**2015 Supply Drought Impact (AFY)**	**2015 Supply (AFY)**	**2020 Supply (AFY)**	**2025 Supply (AFY)**
Casitas Municipal Water District [2][3]	4,600	5,111	5,379	5,379
Ventura River / Foster Park [3]	0-2,000	4,200	4,200-6,700	4,200-6,700
Mound Groundwater Basin	4,000	4,000	4,000	4,000
Oxnard Plain Groundwater Basin [4]	3,918	3,918	3,799	3,799
Santa Paula Groundwater Basin				
Original City Allocation [5]	1,600	1,600-3,000	1,600-3,000	1,600-3,000
City Acquired Water Rights [6]	5.8	5.8	5.8	5.8
Recycled Water	700	700	700	1,400
Total	**14,824 - 16,824**	**19,535 - 20,935**	**19,684 – 23,584**	**20,384 – 24,284**

[1] None of these numbers preclude the City's water rights.

[2] Supply will be adjusted as demand increases within the Casitas service area.

[3] A lower supply range reflects the current drought conditions continuing through 2015; minimum supply from Ventura River/Foster Park; and potential cutbacks from Casitas (estimated to be 10%)

[4] Fox Canyon Groundwater Management Agency (FCGMA) Emergency Ordinance E allocations were adopted by FCGMA Board on April 11, 2014.

[5] The Santa Paula Basin Judgment allows the City to utilize on average 3,000 AF annually. There is potential for future reductions, therefore the supply range is shown from 1,600 to 3,000 AFY.

[6] Water rights acquired for the past development of Tract 4632.

D. POTENTIAL ADDITIONAL FUTURE SUPPLY SOURCES

1. State Water Project

No changes from the 2013 CWRR.

2. Saticoy County Yard Well

No changes from the 2013 CWRR.

3. Recycled Water

a. Ventura Water Reclamation Facility (VWRF)

As stated in the 2013 CWRR, the City's Discharge Permit issued by the Regional Water Quality Control Board (RWQCB) allowed continuation of the City's discharge to the Santa Clara River Estuary (SCRE) but required the City to complete three extensive studies. These studies included the Estuary Subwatershed Study (completed March 2010), Phase 1 Recycled Water Market Study (completed March 2010), and Treatment Wetlands Feasibility Study (completed March 2010). These were collectively referred to as the Phase 1 Studies.

After the February 21, 2013 Stakeholder Workshop, the Estuary Special Studies Phase 2: Facilities Planning Study for Expanding Recycled Water Delivery Final Report dated March 2013, along with other Phase 2 related studies was completed. At the conclusion of the Phase 2 Studies, several stakeholders still had concerns about identified data gaps and the study findings. In response to these concerns, the RWQCB adopted the City's current NPDES Permit (R4-2013-0174) (Permit) for the VWRF with requirements to conduct additional estuary studies. These studies are intended to provide sufficient information to allow the RWQCB to determine whether or not the continued discharge of effluent enhances the SCRE. In addition, the Permit includes other studies related to the continued discharge of effluent to the SCRE. The species studies in the Permit include:

1) <u>Phase 3 Studies</u> - The City to perform additional estuary studies to provide sufficient information to allow the Regional Water Board to determine whether or

not the continued discharge of effluent enhances the Estuary. The study will clarify the water budget analysis for the SCRE, to determine whether any effluent discharge is needed to sustain the SCRE native species, and if so how much.

2) Nutrient and Toxicity Special Study - The City to perform a special study to identify the cause of nutrient, dissolved oxygen and toxicity impairments in the SCRE. If it is determined that the effluent from the Facility is causing the impairments, the Facility must propose a plan for reducing nutrient loading, including ammonia, nitrogen and phosphorus loading and toxicity impairments.

3) Groundwater Special Study – The City to perform a special study to document the interaction between the SCRE, discharge and groundwater and determine if the beneficial use of MUN applies to the water impacted by the discharge.

The City is currently finalizing a Phase 3 Workplan to be used to meet the objectives of these special studies.

b. Ojai Valley Sanitary District (OVSD)

City Council approved the City entering into a Professional Services Agreement with Carollo Engineers, Inc. to provide engineering services to prepare an Ojai Valley Sanitary District Reuse Feasibility Analysis and Title 22 Engineering Report. This project will allow the City and OVSD to continue to discuss and work together to further investigate the potential reuse of OVSD effluent. The project has been “kicked-off” and the first of two stakeholder workshops is being planned.

4. Ocean Desalination

No changes from the 2013 CWRR.

5. Water Conservation Measures/Water Efficiency Plan

In October 2013 Ventura Water presented an update on Year Two of the Water Efficiency 5 Year Plan to City Council. The Year Two focus includes customer and student outreach,

City Park landscapes, demonstration gardens, residential and business assistant grants and energy and water efficiency improvements.

In February 2014, in response to the current drought, Council approved staff's recommendation to request customers to voluntarily reduce their water usage by 10%. As a follow-up to the February council meeting and the continuing drought conditions staff will be presenting a Water Shortage Contingency Plan to Council in June 2014. The purpose of the plan will be to provide guidance during the various stages of a water shortage, and will include voluntary and mandatory stages to: (1) keep water use within pumping capacity and delivery capability, based on recommendations of Ventura Water, (2) define procedures to be used when the above criteria cannot be met, and (3) familiarize citizens, businesses and industry with procedures which may be implemented when voluntary or mandatory water restrictions are required.

6. Establish Water Rights Ordinance

As stated in the 2013 CWRR, Ventura Water took the concept of a water rights ordinance to Council in September 2012. Council directed staff to prepare a draft water rights ordinance and return to Council. Public Workshops on the concept of a water rights ordinance were held in July and October of 2013 and several presentations were made at public meetings. In March 2014 staff gave a presentation to Council at a special workshop on the proposed Water Dedication and In-Lieu Fee Ordinance and Resolution. The Ordinance to Establish Water Dedication and In-Lieu Fee Requirements for New or Intensified Development and its associated resolution establishes a mechanism whereby developers can dedicate adequate water supplies to support a proposed new or intensified development or pay an in-lieu fee so that the City can develop the necessary water supplies. In addition, if a developer is able to demonstrate extraordinary efficiency they could receive credit for the water savings, and thereby reduce the in-lieu fee they could be required to pay. It is anticipated that Ventura Water will return to Council in June 2014 to recommend that Council approve the proposed Water Dedication and In-Lieu Fee Ordinance and Resolution.

5. CONCLUSIONS & RECOMMENDATIONS

A. CONCLUSIONS

The City's total water demand for the most recent calendar year (2013) of data was 17,723 AFY. Over the past five years (2009-2013), the City experienced an average annual water demand of 17,343 AFY, and over the past ten years (2004-2013), the annual average water demand was 18,373 AFY. Although there have been extenuating circumstances that have occurred over the previous five year period, including an extended economic downturn, significant restrictions to the imported water supply to southern California, legal challenges to the Ventura River water supply and several years of drought conditions, it is recommended to include a larger data set to predict a "typical" average annual water demand. However, the City has identified a large industrial user that has significantly, and permanently, reduced their dependence on potable water in recent years. Therefore, the City is more comfortable that the 5-year average is more reflective of the current demand condition. Therefore the current baseline water demand is established to be 17,343 AFY.

The City has a total of 42 projects that are under construction or approved for development. These projects include an additional 889,728 SF of non-residential development and 2,394 residential dwelling units. By developing water usage factors based on recent consumption data, the City can more accurately predict the additional future water demand for the approved development projects. Using the City-specific water usage factors, the under construction and approved development projects will generate an additional annual average water demand of 1,085 AFY. Therefore, the estimated water demands that the City is committed to supply total 18,428 AFY. Assuming an average absorption rate of 350 dwelling units per (and the equivalent growth in non-residential development), it is anticipated that the currently under construction and approved projects will be completed by year 2020.

The City's available water supply is constantly changing, depending upon environmental and legal constraints. The City's current available water supply is 19,600 AFY, however in 2015 it is possible the available water supply could drop to an annual average of 16,246 AFY.

The near-term water supply picture to meet the needs of the development projects that are under construction and approved will remain relatively the same as the existing condition, however the

City can expect to increase the water supply from Casitas by 379 AFY to meet the additional water demand in the Casitas boundary.

Table 5-1 provides a comparison of the existing water demand and supply, and the near-term water demand and supply. It should be noted that the low end of the water supply range is less than the anticipated demand beginning in year 2017.

Table 5-1
Demand vs. Supply Comparison

Year	Demand AFY	Supply Range			
		Low		High	
		AFY	% Diff.	AFY	% Diff.
2013	17,343	18,000	3.7%	19,600	11.5%
2014	17,501	18,055	3.1%	19,668	11.0%
2015 (Drought)	17,660	14,824	-19.1%	16,824	-5.0%
2015	17,660	19,535	9.6%	20,935	15.6%
2016	17,819	19,565	8.9%	21,465	17.0%
2017	17,977	19,595	8.3%	21,995	18.3%
2018	18,136	19,624	7.6%	22,524	19.5%
2019	18,295	19,654	6.9%	23,054	20.6%
2020	18,428	19,684	6.4%	23,584	21.9%
2021	18,428	19,824	7.0%	23,890	22.9%

The water supply range and demand projections are also depicted graphically in Figure 5-1.

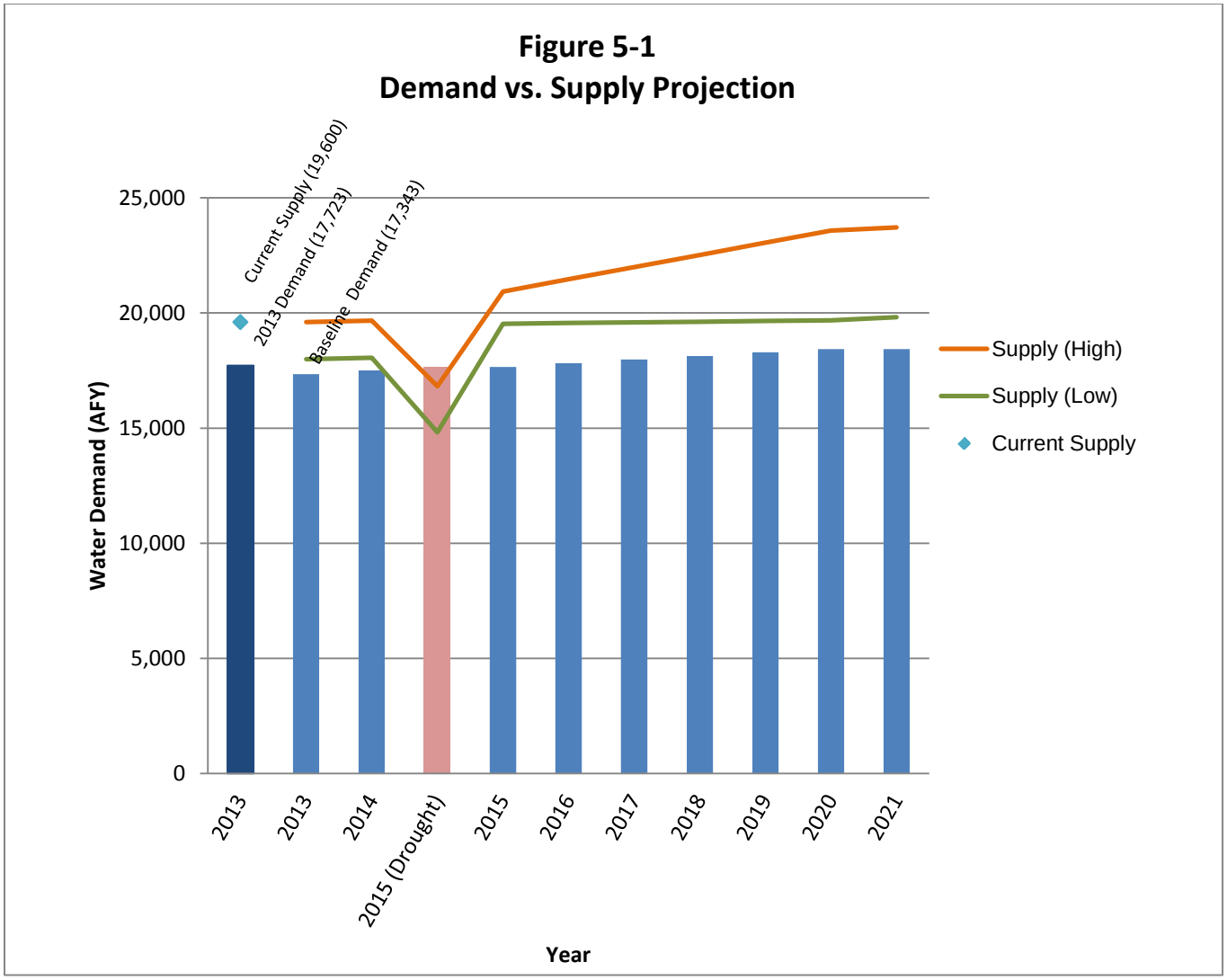


Figure 5-1
Demand vs. Supply Projection
Current Supply (19,600)
2013 Demand (17,723)
Baseline Demand (17,343)
25,000
20,000
15,000
10,000
5,000
0
Water Demand (AFY)
2013
2013
2014
2015 (Drought)
2015
2016
2017
2018
2019
2020
2021
Year
Supply (High)
Supply (Low)
Current Supply

B. RECOMMENDATIONS

The results of this Report indicate that the spread between the current water demand and the current water supply is very tight, and if the drought continues the supply could be less than the demand. This presents significant challenges for the City moving forward in the ability to allocate water supply to development projects that will generate additional water demands. The recommendations for the City moving forward include:

1. Track the total water consumption on an annual basis.
2. Re-calculate the 3-year, 5-year and 10-year water consumption averages on an annual basis.
3. Update the water supply portfolio on an annual basis.
4. Update the existing land use data on an annual basis. This can be done through a system that tracks the development projects as the transition from “Under Construction” to “Existing,” and “Approved” to “Under Construction.”
5. All future development projects should be evaluated based on current supply and demand conditions.
6. Consider adding a new project type in the land use tracking spreadsheet for approved projects under CIP or other City approval processes.
7. Use the City-specific water usage factors to calculate the water demand of all development projects as the projects proceed through the City process prior to approval.
8. Continue to develop water supply through demand side management, securing water rights, establishing an in-lieu fee ordinance and continue to integrate the new water supply sources into the City’s water supply portfolio.