2015 COMPREHENSIVE WATER RESOURCES REPORT

FINAL Report

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May 18, 2015

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 10, 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.

On May 5, 2014, the City Council approved the 2014 Comprehensive Water Resources Report.

2015 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.

Council approved the 2014 CWRR in May 2014.

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)	2016 Drought (AFY)	2016 (AFY)	2020 (AFY)	2025 (AFY)
Supply	14,888 – 16,888	13,802 – 16,461	19,484 – 20,884	19,717 – 23,617	20,477 – 24,377
Demand*	17,328	17,488	17,488	18,129	18,295
Available Supply	**(2,440) – (440)**	**(3,686) – (1,027)**	**1,996 – 3,396**	**1,588 – 5,488**	**2,182 – 6,082**

**Demand equals baseline 5 year average (17,167 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 2016 drought water supply numbers are less than the projected water demand numbers. This indicates that if the continued drought condition persists, the City's customers will need to continue to increase their water conservation and comply with the Stage 3 water shortage emergency conservation measures and/or pay penalties for overuse of the City's water supply sources.

Changes from the 2014 CWRR to the 2015 CWRR are summarized below.

Baseline Demand

The baseline water demand of 17,343 acre feet (AF) in the 2014 CWRR was established utilizing the previous 5-year City annual average. Utilizing the same criteria, the baseline water demand for the 2015 CWRR is 17,167 AF, a decrease of approximately 176 AF. This decrease can mainly be attributed to a 7% lower calendar year 2014 water demand that decreases the five year average, the prolonged economic downturn, increased water rates, and the City's request to customers to voluntarily reduce their water usage by at least 10% in response to the prolonged drought.

Supply

Current Water Supply

The current water supply numbers have remained unchanged in each of the past CWRR's. The current water supply is known as the *Normal Water Supply* in the City's March 2015 Water Shortage Event Contingency Plan.

Projected Future Water Supply

The 2014 CWRR projected future water supply numbers were revised in the 2015 CWRR to reflect changes to the City's existing supply sources that have come up over the past year including the continued drought condition and the projection of the drought through 2016. The water supply sources revisions are due to the following water supply issues:

- Casitas: A reduction in the amount of available water from Casitas due to the extended drought. At the time of this report the storage in Lake Casitas is below 50% capacity. As indicated in the City's existing 1995 agreement with Casitas that refers to Casitas Ordinance 92-7, it is anticipated that Casitas Municipal Water District will require a cutback in the City's supply. We have included an anticipated required reduction of 20% to our Casitas supply for the projection of the current drought through 2016. The Casitas supply is based on existing and approved projects within the Casitas boundary.

- 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 projections from the Ventura River for the projection of the continued drought through 2016.

- Mound Groundwater Basin: No revisions were made to this supply source.

- Oxnard Plain Groundwater Basin (Fox Canyon Aquifer): After several special meetings 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 pumping 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. As of January 1, 2016, the City will be restricted to 242 AF less (3,862 AF) than the City's current allocation of 4,104 AF. The City will pay surcharges for exceeding its allocation because the City may not rely on its conservation credits that were set aside during wet years. Prior to approval of Ordinance E, the city was relying on approximately 25,000 AF of conservation credits that have now been suspended. The City was utilizing approximately 1,000 AF of conservation credits annually. On June 14, 2014, the City requested a variance to our allocation per Ordinance E and

was denied by FCGMA staff. The City then made an appeal to the FCGMA Board on January 28, 2015, and was denied by the FCGMA Board.

- Santa Paula Groundwater Basin (Santa Paula Basin): The low range has been decreased from 1,600 AF to 1,141 AF for the projection of the drought through 2016. This is based on an assumed worst case scenario that the basin will be determined to be in a Stage 2 overdraft per the Court's Stipulated Judgment. No additional water rights were acquired for the development within the Santa Paula Basin area; therefore the City's acquired water rights remain as 5.8 AF.

- Recycled Water: No revisions were made to this supply source.

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 persists 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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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 2015 CWRR, and all previous year CWRR's are 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 2015 CWRR. The intent of the 2015 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 will not 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).

As the 2014 CWRR did, the 2015 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, 2014. 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, 2014 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

The following list of references is in addition to the references listed above and was used in the preparation of 2015 CWRR:

- City of Ventura Water Shortage Event Contingency Plan, dated March 2015

2. LAND USE

A. EXISTING LAND USE

For the purposes of this Report, the "existing" land use picture is considered the year-end of 2014. In order to determine the existing land use make-up within the City's water service area as of year-end 2014, all known development projects constructed and utilizing water within Calendar Year 2014 were added to the land use data published in the 2014 CWRR for the year-end 2013. An updated Table 2-3 provides a summarized total of the existing (year-end 2014) land use within the City service area. It should be noted that Table 2-3 only includes projects/units that were constructed and utilizing water as of the end of the recent calendar year.

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 2014

	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
Constructed (Built Projects 2014) [4]	0	0	147,060
Total Existing Land Use (through 2014)	**22,605**	**18,511**	**17,469,012**

[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 Chick-Fil-A: 4,356 SF).

[4] Per data provided by Ventura Water, Built Projects part of CY 2014 water demand:

- PROJ-04282 4,829 SF Office Bldg.
- PROJ-2695 7,434 SF Bank Office Bldg.
- PROJ-5097 134,797 SF Beverage Distribution Center (Commercial)

Note: This table only includes projects/units that were built and utilized water during the noted calendar year. The projects/units were included in the previous CWRR Table 2-4 and have been removed from the current CWRR Table 2-4.

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, 2014 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 - as of December 2014

						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 / Irrig. Area (ac)	Single-Family (Units)	Multi-Family (Units)	Total (Units)	Area (ac)	Total Annual Demand (GPD)	Total Annual Demand (AFY)
PROJ-00687 [4]	Mixed Use	CAFÉ SCOOP - Stajen	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	4,873	0	0	0	0	4,873	0	0			10	10	0.5	3,791	4.25
PROJ-00756 [4]	Mixed Use	ANASTASI - HARBOR & SEAWARD	All Planning Approvals	NO	Mixed Use - Commercial/Residential	20,230	0	0	0	0	20,230	0	0			138	138	5.6	39,861	44.65
PROJ-01181 [3]	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	1,579	1.77
PROJ-5211 [1]	Residential	CITRUS APARTMENTS	Under Construction	NO	Apartment Complex						0	0	0	0.37		54	54		14,240	15.95
PROJ-01520 [4]	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	7,913	8.86
PROJ-02225 [4]	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	11,943	13.38
PROJ-03198 [4]	Residential	REXFORD	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0			25	25	0.5	6,250	7.00
PROJ-6355 [4]	Residential	CITY VENTURES, ORCHARD COLLECTION (formerly Citrus Place Phases 2&3)	Under Construction	NO	59 Single Family Residences; 60 Townhouses	0	0	0	0	0	0	0	0		59	60	119	9.4	36,830	41.25
PROJ-03614 [4]	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	10,136	11.35
PROJ-03617 [4]	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	62,063	69.51
PROJ-03676 [4]	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	4,318	4.84
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	20,071	22.48
PROJ-03826 [4]	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	62,970	70.53
PROJ-03829 [4]	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	107,420	120.31
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	1,696	1.90
PROJ-03865 [4]	Residential	MATILIJA (211-235 N. Garden Street)	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0			28	28	0.9	7,000	7.84
PROJ-04154 [4]	Residential	WESTSIDE RENAISSANCE (formerly Centex)	All Planning Approvals	YES	120 Single Family Residence, 36 Condominiums, 2.55 AC Parks	0	0	0	0	0	0	0	0	2.55	120	36	156	25.3	58,500	65.52
PROJ-04182 [4]	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	20,471	22.93
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	10,663	11.94
PROJ-04296 [4]	Residential	GOLDBERG	All Planning Approvals	YES	5 Condominiums	0	0	0	0	0	0	0	0			5	5	0.2	1,250	1.40
PROJ-04315 [4]	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	3,750	4.20
PROJ-6237	Mixed Use	SONDERMANN-RING-Amendment	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	2.44		300	300	26.9	85,445	95.70
PROJ-04590 [4]	Residential	HUGHES (2511 Vista Del Mar Drive)	All Planning Approvals	YES	3 Condominiums	0	0	0	0	0	0	0	0			3	3	0.2	750	0.84
PROJ-01857	Residential	HEARTHSIDE - JENVEN VILLAGE LLC	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	12,750	14.28
PROJ-04691	Residential	CHAPMAN, MIKE	Under Construction	YES	7 Apartments	0	0	0	0	0	0	0	0			7	7	0.5	1,750	1.96
PROJ-1126	Residential	HEMLOCK APARTMENTS	All Planning Approvals	YES	23 Apartments	0	0	0	0	0	0	0	0			23	23	0.6	5,750	6.44
PROJ-7125 [4] [5] (was PROJ-1200)	Mixed Use	LOGUE FAMILY	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	7,300	0	0	0	0	7,300	0	0			125	125	5.9	33,185	37.17
PROJ-1678	Institutional	CMH - NEW HOSPITAL	Under Construction	YES	Construction of a hospital building (320,000 sq ft and 230 beds), adaptive reuse 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	125,350	140.40
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	38,500	43.12
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	23,055	25.82
PROJ-4154	Residential	EAST VILLAGE RESIDENTIAL - CEDC Apartments	Under Construction	NO	50 Low Income Apartments	0	0	0	0	0	0	0	0			50	50	2.5	12,500	14.00
PROJ-4222 [4]	Residential	PARKLANDS APARTMENTS	All Planning Approvals	NO	173 Apartments with Community Building	0	0	0	7,115	0	7,115	0	0			173	173	7.1	45,135	50.55
PROJ-4627	Commercial	VALERO	All Planning Approvals	YES	New automatic carwash and canopy	912	0	0	0	0	912	0	0				0	0.6	242	0.27
PROJ-4184 [4]	Mixed Use	ENCLAVE PROJECT - WATT Properties	All Planning Approvals	NO	91 Homes						0			2.52	77	14	91	9.2	37,030	41.48
PROJ-6576	Institutional	VENTURA COLLEGE	Under Construction	NO	Ventura College Maintenance and Operations renovation - demolishing 11,132 sq ft and adding 14,418 sq ft for a net increase of 3,286 sq ft				3,286		3,286						0		871	0.98
PROJ-7290 [5] (was PROJ-04263)	Residential	SANTA CLARA COURTS (DALY) 72 W. Santa Clara St.	Under Construction	YES	Condos 24 units						0					24	24		6,000	6.72
PROJ-6098 [2]	Residential	LA BARRANCA-5533 Foothill Rd.	All Planning Approvals	YES	9 Single Family Residences						0				9		9		3,330	3.73
PROJ-6263 [2]	Residential	SANTA CLARA APTS - 1254 & 1268 E. Santa Clara St.	All Planning Approvals	YES	8 Residential Units						0					8	8		2,000	2.24
PROJ-7318 [2]	Industrial	SILVER BAY FOODS - TRANSPORT & WALTER	All Planning Approvals	NO	New fish processing building			62,000			62,000						0		N/A	45.67
PROJ-7213 [2]	Commercial	398 ASH ST - TRAILER HOTEL	All Planning Approvals	YES	New airstream trailer park						0				34		34		12,580	14.09
PROJ-7286 [2]	Commercial	UNION BANK - MILLS & MAIN	All Planning Approvals	NO	New Bank (4860 SF)	4,860					4,860						0	0.1	1,288	1.44
PROJ-7323 [4] [5] (was PROJ-04543)	Mixed Use	2200 E MAIN ST - ANASTASI (ASBELL) (formerly Renaissance Holdings)	All Planning Approvals	YES	Mixed Use High Density						0					26	26		6,500	7.28
PROJ-4007 [6]	Commercial	IN-N-OUT BURGER EXPANSION	All Planning Approvals	NO	Expansion includes additional parking and landscaping however no net increase in water demand is anticipated						0								-	0.00
Park [3]	Park	VENTURA COMMUNITY PARK SOFTBALL FIELDS	Under Construction	NO	Softball Field						0			5.50			0		11,000	12.32
PROJ-04300 [4] [5]	Mixed Use	VENTURA EAST VILLAGE	All Planning Approvals	NO	14,000 SF Market, 15,500 SF Drugstore and 2,911 SF Drive Thru Restaurant for a total of 32,411 SF	32,411					32,411								8,589	9.62
TOTAL						**112,396**	**87,000**	**296,200**	**336,361**	**6,400**	**838,357**	**230**	**128**	**13.38**	**646**	**1,817**	**2,463**	**225**	**966,315**	**1,128**
					Total within Casitas Boundary	33,895	0	0	325,960	0	359,855	230	0	2.6	163	655	818	47	365,072	409
					Total not in Casitas Boundary	78,501	87,000	296,200	10,401	6,400	478,502	0	128	10.8	483	1,162	1,645	178	581,654	719

[1] Not part of CY 2014 water consumption (connected to City water, not yet occupied).
[2] Approved projects during CY 2014 per Community Development Planning Projects List dated February 11, 2015.
[3] Approved project through CIP or other City approval process as of end of CY 2014.
[4] Projects with Existing Maps per Community Development Planning Existing Map List, dated April 2015.
[5] Projects previously approved and/or revised.
[6] Approved May 21, 2014 at Joint Planning Commision/DRC Meeting. Project includes parking lot and landscape improvements, however no new water demands are anticipated.

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
Constructed (Built 2014) [4]	0	0	147,060	0	0	147,060
Remaining Developable Land (as of end 2014)	***6,378***	***916,920***	***746,053***	***1,480,894***	***530,000***	***3,673,866***
Approved & Under Construction Projects [3]	2,463	112,396	6,400	632,561	87,000	838,357
Remaining Developable Land (through 2025)	**3,915**	**804,524**	**739,653**	**848,333**	**443,000**	**2,835,509**

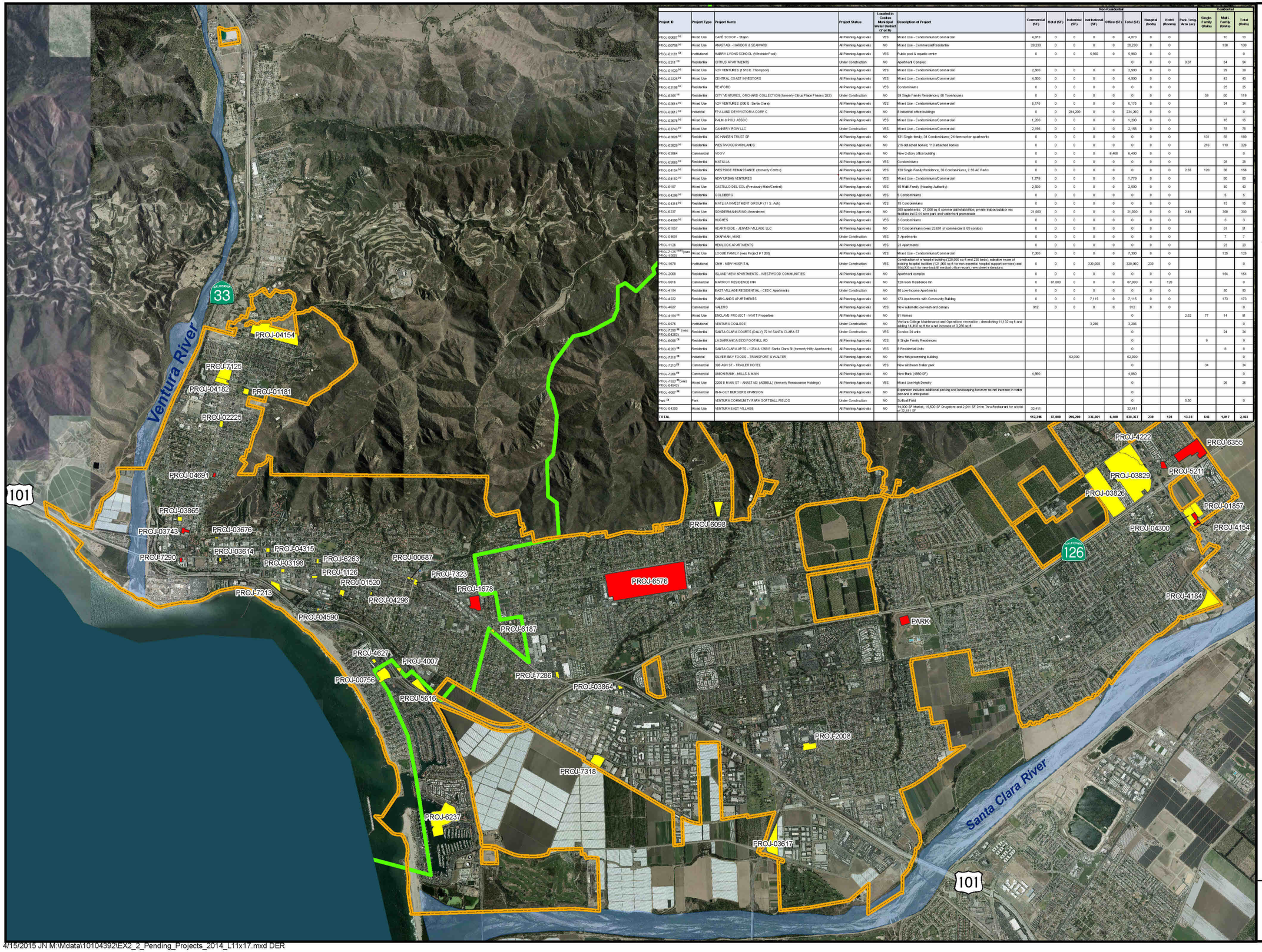
[1] Source: Table 3-2 of 2005 General Plan.

[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.

Project ID	Project Type	Project Name	Project Status	Located in Casitas Municipal Water District (Y or N)	Description of Project	Non-Residential								Residential		
						Commercial (SF)	Hotel (SF)	Industrial (SF)	Institutional (SF)	Office (SF)	Total (SF)	Hospital (beds)	Hotel (Rooms)	Park / Intg. Area (ac)	Single Family (Units)	Multi Family (Units)	Total (Units)
PROJ-00687 [a]	Mixed Use	CAFÉ SCOOP - Stajen	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	4,873	0	0	0	0	4,873	0	0			10	10
PROJ-00756 [a]	Mixed Use	ANASTASI - HARBOR & SEAWARD	All Planning Approvals	NO	Mixed Use - Commercial/Residential	20,230	0	0	0	0	20,230	0	0			138	138
PROJ-01181 [b]	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
PROJ-5211 [b]	Residential	CITRUS APARTMENTS	Under Construction	NO	Apartment Complex						0	0	0	0.37		54	54
PROJ-01520 [a]	Mixed Use	VZV VENTURES (1,970 E. Thompson)	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	2,500	0	0	0	0	2,500	0	0			29	29
PROJ-02225 [a]	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
PROJ-03598 [a]	Residential	REXFORD	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0			25	25
PROJ-03656 [a]	Residential	CITY VENTURES, ORCHARD COLLECTION (formerly Citrus Place Phase I 283)	Under Construction	NO	59 Single Family Residences; 60 Townhouses	0	0	0	0	0	0	0	0		59	60	119
PROJ-03614 [a]	Mixed Use	VZV 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
PROJ-03617 [a]	Industrial	FP & LAND DEV/VICTORIA CORP C	All Planning Approvals	NO	9 industrial office buildings	0	0	234,200	0	0	234,200	0	0				0
PROJ-03676 [a]	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
PROJ-03743 [b]	Mixed Use	CANNERY ROW LLC	Under Construction	YES	Mixed Use - Condominiums/Commercial	2,156	0	0	0	0	2,156	0	0			78	78
PROJ-03826 [a]	Residential	UC HANSEN TRUST SP	All Planning Approvals	NO	131 Single family; 34 Condominiums; 24 farm-worker apartments	0	0	0	0	0	0	0	0		131	58	189
PROJ-03829 [a]	Residential	WESTWOOD/PARKLANDS	All Planning Approvals	NO	216 detached homes; 110 attached homes	0	0	0	0	0	0	0	0		216	110	326
PROJ-03864	Commercial	VOOV	All Planning Approvals	NO	New 2-story office building.	0	0	0	0	6,400	6,400	0	0				0
PROJ-03865 [a]	Residential	MATILIJA	All Planning Approvals	YES	Condominiums	0	0	0	0	0	0	0	0			28	28
PROJ-04154 [a]	Residential	WESTSIDE RENAISSANCE (formerly Centro)	All Planning Approvals	YES	120 Single Family Residence; 36 Condominiums; 2.55 AC Parks	0	0	0	0	0	0	0	0	2.55	120	36	156
PROJ-04182 [a]	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
PROJ-4187	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
PROJ-04296 [a]	Residential	GOLDBERG	All Planning Approvals	YES	5 Condominiums	0	0	0	0	0	0	0	0			5	5
PROJ-04315 [a]	Residential	MATILIJA INVESTMENT GROUP (11 S. Ash)	All Planning Approvals	YES	15 Condominiums	0	0	0	0	0	0	0	0			15	15
PROJ-4237	Mixed Use	SONDERMAN/RINO - Amendment	All Planning Approvals	NO	300 apartments; 21,000 sq ft commercial/retail/office; private indoor/outdoor rec facilities (w/ 2.44 acre park and waterfront promenade	21,000	0	0	0	0	21,000	0	0	2.44		300	300
PROJ-04590 [a]	Residential	HUGHES	All Planning Approvals	YES	3 Condominiums	0	0	0	0	0	0	0	0			3	3
PROJ-01857	Residential	HEARTHSIDE - JENVEN VILLAGE LLC	All Planning Approvals	NO	51 Condominiums (was 23,691 sf commercial & 83 condos)	0	0	0	0	0	0	0	0			51	51
PROJ-04691	Residential	CHAPMAN, MIKE	Under Construction	YES	7 Apartments	0	0	0	0	0	0	0	0			7	7
PROJ-1126	Residential	HEMLOCK APARTMENTS	All Planning Approvals	YES	23 Apartments	0	0	0	0	0	0	0	0			23	23
PROJ-7126 [b] (was PROJ-12005)	Mixed Use	LOGUE FAMILY (was Project # 1200)	All Planning Approvals	YES	Mixed Use - Condominiums/Commercial	7,300	0	0	0	0	7,300	0	0			125	125
PROJ-1678	Institutional	OMH - NEW HOSPITAL	Under Construction	YES	Construction of a hospital building (320,000 sq ft and 230 beds), adaptive reuse of existing hospital facilities (121,000 sq ft for non-essential hospital support services) and 104,000 sq ft for new back/fill medical office reuse), new street extensions	0	0	0	320,000	0	320,000	230	0				0
PROJ-2008	Residential	ISLAND VIEW APARTMENTS - WESTWOOD COMMUNITIES	All Planning Approvals	NO	Apartment complex	0	0	0	0	0	0	0	0			154	154
PROJ-6016	Commercial	MARRIOT RESIDENCE INN	All Planning Approvals	NO	128 room Residence Inn	0	87,000	0	0	0	87,000	0	128				0
PROJ-4154	Residential	EAST VILLAGE RESIDENTIAL - CEDC Apartments	Under Construction	NO	50 Low Income Apartments	0	0	0	0	0	0	0	0			50	50
PROJ-4222	Residential	PARKLANDS APARTMENTS	All Planning Approvals	NO	173 Apartments with Community Building	0	0	0	7,115	0	7,115	0	0			173	173
PROJ-4627	Commercial	VALERO	All Planning Approvals	YES	New automatic carwash and canopy	912	0	0	0	0	912	0	0				0
PROJ-4184 [a]	Mixed Use	ENCLAVE PROJECT - WATT Properties	All Planning Approvals	NO	91 Homes						0			2.62	77	14	91
PROJ-6576	Institutional	VENTURA COLLEGE	Under Construction	NO	Ventura College Maintenance and Operations renovation - demolishing 11,132 sq ft and adding 14,418 sq ft for a net increase of 3,286 sq ft				3,286		3,286						0
PROJ-7290 [b] (was PROJ-04282)	Residential	SANTA CLARA COURTS (DALY) 72 W SANTA CLARA ST	Under Construction	YES	Condos 24 units						0					24	24
PROJ-6098 [b]	Residential	LA BARRANCA-5533 FOOTHILL RD	All Planning Approvals	YES	9 Single Family Residences						0				9		9
PROJ-6263 [b]	Residential	SANTA CLARA APTS - 1254 & 1288 E Santa Clara St (formerly Hilty Apartments)	All Planning Approvals	YES	8 Residential Units						0					8	8
PROJ-7318 [b]	Industrial	SILVER BAY FOODS - TRANSPORT & WALTER	All Planning Approvals	NO	New fish processing building			62,000			62,000						0
PROJ-7213 [b]	Commercial	398 ASH ST - TRAILER HOTEL	All Planning Approvals	YES	New airstream trailer park						0				34		34
PROJ-7286 [b]	Commercial	UNION BANK - MILLS & MAIN	All Planning Approvals	NO	New Bank (4860 SF)	4,860					4,860						0
PROJ-7323 [b] (was PROJ-04543)	Mixed Use	2200 E MAIN ST - ANASTASI (ASBELL) (formerly Renaissance Holdings)	All Planning Approvals	YES	Mixed Use High Density						0					26	26
PROJ-4007 [b]	Commercial	IN-N-OUT BURGER EXPANSION	All Planning Approvals	NO	Expansion includes additional parking and landscaping however no net increase in water demand is anticipated						0						
Park [b]	Park	VENTURA COMMUNITY PARK-SOFTBALL FIELDS	Under Construction	NO	Softball Field						0			5.50			0
PROJ-04300	Mixed Use	VENTURA EAST VILLAGE	All Planning Approvals	NO	14,000 SF Market, 15,500 SF Drugstore and 2,911 SF Drive Thru Restaurant for a total of 32,411 SF	32,411					32,411						
TOTAL						112,196	87,000	296,200	336,361	6,400	838,357	230	128	13.30	646	1,817	2,463



VENTURA WATER

Projects Approved and Under Construction (as of December 2014)

Legend

- Ventura City Limit
- Casitas Municipal Water District Boundary

Project Status

- All Planning Approvals
- Under Construction

Note: Reference Table 2-4 for water demand information information for each project shown on exhibit.

0 0.5 1
Miles

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

Michael Baker INTERNATIONAL

Exhibit 2-2

4/15/2015 JN M:\Mdata\10104392\EX2_2_Pending_Projects_2014_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) 2005 - 2014 (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 2014. As shown in Table 3-1, the total water consumption for CY 2014 was 16,995 AFY (including the 6.5% water loss factor), down from CY 2013. This decrease can mainly be attributed to a 7% lower CY 2014 water demand that decreases the five-year running average, the prolonged economic downturn, increased water rates and the City's request to customers to voluntarily reduce their water usage by at least 10% in response to the prolonged drought. 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 2014

City Consumption Category	Water Consumption (HCF) [1]	Water Consumption (gpm)	Water Consumption (gpd)	Water Consumption (AFY)	Water Consumption + 6.5% Loss (AFY)
Single Family	2,930,487	4,170.48	6,005,491	6,728	7,165
Multi Family	1,600,252	2,277.38	3,279,421	3,674	3,912
Commercial/Retail/Industrial/Hotel	1,418,556	2,018.80	2,907,068	3,257	3,468
Public/Institutional (Municipal/Church/School)	270,346	384.74	554,024	621	661
Hospitals	88,699	126.23	181,772	204	217
Parks/Landscape/Irrigation	429,999	611.95	881,203	987	1,051
Other [2]	212,751	302.77	435,994	488	520
Total	**6,951,090**	**9,892.34**	**14,244,973**	**15,958**	**16,995**

[1] Source: HCF Consumption Data Tables (CY 2014) 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 2005 through 2014. Table 3-5 provides a summary of the City-wide water consumption for each year from 2005 to 2014. The consumption numbers are also depicted graphically on Figure 3-1.

As noted in the table, the average annual water consumption for Years 2005-2009 (19,022 AFY) was significantly higher than the average annual consumption for Years 2010-2014 (17,167 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. Due to the prolonged drought, in February 2014 the City requested its customers to voluntarily reduce their water usage by at least 10%, and in September 2014 the City implemented a 20% mandatory reduction.

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 17,167 AFY, with the lowest year approximately 3.6% lower than the average and the highest year approximately 4.9% above the average. Over the 10-year period, the average annual water consumption was 18,095 AFY, with the lowest year approximately 8.5% lower than the average and the highest year approximately 10.1% 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 persistent 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 late 2000s. The City has seen their reduced dependence on the potable water system to be a permanent condition since 2008; therefore at this time 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 17,167 AFY. The City will reevaluate using a 10-year average in the 2018 CWRR.

Table 3-5
Historical Annual Water Consumption

Calendar Year	Consumption [1] (AFY)	Averages 3-year	5-year	10-year
2005	18,914			
2006	19,382			
2007	*19,931*		*19,022*	
2008	19,014			
2009	17,871			18,095
2010	16,565			
2011	*16,550*			
2012	18,004		17,167	
2013	17,723	17,574		
2014	16,995			

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

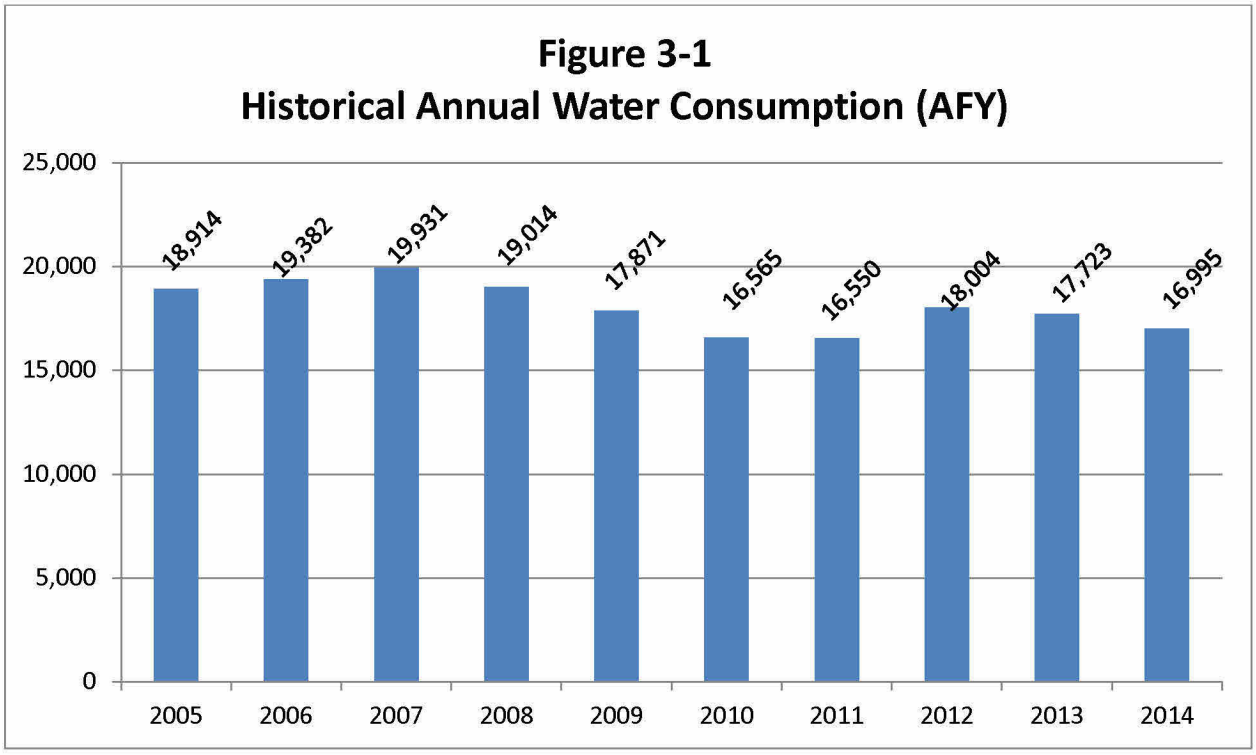


Figure 3-1
Historical Annual Water Consumption (AFY)
25,000
20,000
15,000
10,000
5,000
0
18,914
19,382
19,931
19,014
17,871
16,565
16,550
18,004
17,723
16,995
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014

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 2014, 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 1,128 acre-feet/year (AFY). Table 3-6 also identifies the portion of the near-term demands, 409 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 18,295 AFY, as shown on Table 3-7.

In order to estimate the growth of the future water demands, an 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 2022, per Table 3-8.

Table 3-6
Total Estimated Demands for Under Construction and Approved Projects - as of December 2014

Water Demand Factor Classification	Quantity [1]	Usage Factor [2]	Estimated Average Water Demand [5]		Quantity [4]	Estimated Average Water Demand (within Casitas Boundary)	
Residential (0-8 du/ac)	646 du	370 gpd/du	239,020 gpd	268 AFY	163 du	60,310 gpd	68 AFY
Residential (9-20 du/ac)	1,817 du	250 gpd/du	454,250 gpd	509 AFY	655 du	163,750 gpd	183 AFY
Residential (21+ du/ac)							
Commercial/Retail/Industrial/Hotel Public/Institutional	456.4 ksf [3] [6]	265 gpd/ksf	120,935 gpd	135 AFY	39.9 ksf [3]	10,562 gpd	12 AFY
Park/Landscape/Irrigation	13.4 ac	2,000 gpd/ac	26,760 gpd	30 AFY	2.6 ac	5,100 gpd	6 AFY
Hospital/Assisted Living	230 bed	545 gpd/bed	125,350 gpd	140 AFY	230 bed	125,350 gpd	140 AFY
Total			***966,315 gpd***	***1,128 AFY***		***365,072 gpd***	***409 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).

[5] Includes 45.7 AF for Silverbay Seafoods (PROJ-7318). Water demand calculated separately.

[6] Excludes 62,000 SF for Silverbay Seafoods (PROJ-7318). Water demand calculated separately due to extreme useage.

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] 1,128 AFY
1-Year: 2014	16,995 AFY	18,123 AFY
3-Year Average: 2012-2014	17,574	18,702
5-Year Average: 2010-2014	**17,167**	**18,295**
10-Year Average: 2005-2014	18,095	19,223
Past 5-Year Period: Annual High Year	18,004	19,132
Past 10-Year Period: Annual High Year	19,931	21,059

[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]
2014			***17,167 AFY***
2015		350	17,328
2016		350	17,488
2017		350	17,648
2018		350	17,809
2019		350	17,969
2020		350	18,129
2021		350	18,289
2022		13	18,295
Totals	**2,463**	2,463	**18,295 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.*
It is noted that the current water supply (Table 4-1) is known as the normal water supply in the City's March 2015 Water Shortage Event Contingency Plan.

C. FUTURE WATER SUPPLY

1. Casitas Municipal Water District (Casitas)

While in-district 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 409 AFY. Therefore, the anticipated future water supply from Casitas will increase by an equivalent amount, to approximately 5,349 AFY, by Year 2020. Using the absorption rate discussed in Section 3, the estimated supply from Casitas is estimated to increase by 116 AFY in year 2016.

Casitas has been stating that Lake Casitas is at risk due to persistent drought conditions and depletion of the Lake Casitas water supply to minimum pool. At the time of this report the storage in Lake Casitas is below 50% capacity. As indicated in the City's existing 1995 agreement with Casitas that refers to Casitas Ordinance 92-7, it is anticipated that Casitas will require a cutback to the City's supply. Casitas has been reviewing their Drought Program and will likely have some changes to the Program soon. For purposes

of this report an estimated reduction of 20% to the City's Casitas supply has been included for the projection of the current drought through 2016 (2016 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 2016 (2016 Supply Drought Impact).

3. Mound Groundwater Basin (Mound Basin)

No changes from the 2013 CWRR.

4. Oxnard Plain Groundwater Basin (Fox Canyon Groundwater Management Agency)

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 242 AF less (3,862 AF) than the City's current allocation of 4,104 AF. The City will pay surcharges for exceeding its allocation because the City may not rely on its conservation credits that were set aside during wet years. Prior to approval of Ordinance E, the City was relying on approximately 25,000 AF of conservation credits that have now been suspended. The City was utilizing approximately 1,000 AF of conservation credits annually. On June 14, 2014, the City requested a variance to our allocation per Ordinance E and was denied by FCGMA staff. The City then made an appeal to the FCGMA Board on January 28, 2015, and was denied by the FCGMA Board.

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 4,827 AFY and with the phased reductions will be 3,862 AFY on January 1, 2016. This equates to a reduction of approximately 29% 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 decreased from 1,600 AF to 1,141 AF for the projection of the drought through 2016. This is based on an assumed worst case scenario that the basin will be determined to be in a Stage 2 overdraft per the Court's Stipulated Judgment. No additional water rights were acquired for development within the Santa Paula Basin area; therefore the City's acquired water rights remain as 5.8 AF.

6. Recycled Water

No changes from the 2013 CWRR.

The City's projected future 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)	2016 Supply Drought Impact (AFY)	2016 Supply (AFY)	2020 Supply (AFY)	2025 Supply (AFY)
Casitas Municipal Water District [2][3]	4,600	4,093	5,116	5,349	5,409
Ventura River / Foster Park [3]	0-2,000	0-800	4,200	4,200-6,700	4,200-6,700
Mound Groundwater Basin	4,000	4,000	4,000	4,000	4,000
Oxnard Plain Groundwater Basin [4]	3,982	3,862	3,862	3,862	3,862
Santa Paula Groundwater Basin					
Original City Allocation [5]	1,600	1,141-3,000	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	5.8
Recycled Water	700	700	700	700	1,400
Total	**14,888 - 16,888**	**13,802 - 16,461**	**19,484 - 20,884**	**19,717 – 23,617**	**20,477 – 24,377**

[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 2016; minimum supply from Ventura River/Foster Park based on water quality and current operations as directed by the State Water Resources Control Board (500 gpm, 66 AF/month); and potential cutbacks from Casitas (estimated to be 20%)

[4] Fox Canyon Groundwater Management Agency (FCGMA) Emergency Ordinance E allocations were adopted by FCGMA Board on April 11, 2014. Temporary extraction allocation for FY 2016 = 3,862 AFY.

[5] The Santa Paula Basin Judgment allows the City to utilize on average 3,000 AF annually. Existing facilities and regulatory requirements limit City operations and there is potential for future reductions, therefore the supply range is shown from 1,600 to 3,000 AFY for normal year supply. Assumes the worst case scenario that the basin is determined to be in a Stage 2 overdraft per the Court's Stipulated Judgment and the City is reduced to an allocation of 1,141 AFY during drought conditions. Assumes the best case scenario of Saticoy Well No. 3 on-line and Saticoy Well No. 2 as a back-up well utilizing the City's full 3,000 AFY allocation.

[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 and 2014 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 special studies in the Permit include:

1) Phase 3 Studies - 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 Municipal (MUN) applies to the water impacted by the discharge.

In December 2014, the City's Phase 3 Workplan was approved by the RWQCB with specified modifications, and data collection for the studies began in January 2015.

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" with a stakeholder workshop held in October 2014.

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 included 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%. Subsequently in September 2014 the City Council declared a Water Shortage Emergency as local water supplies continued to drop during the third year of California's historic drought and correlated with the State Water Resources Control Board's July 2014 action. In addition to water waste prohibitions, the Council approved the Water Shortage Task Force's recommendation to move to a Stage 3 Water Shortage Emergency with an overall 20% mandatory water conservation requirement.

6. Water Shortage Task Force

The City Council created the Water Supply Strategy Task Force, later functionally renamed the Water Shortage Task Force (Task Force), on July 21, 2014 to advise the City Council as actions were needed to respond to dwindling water supplies due to the prolonged drought. The Task Force addressed revisions to the City's Water Shortage Contingency Plan, the development of an incentive program to assist residents in their drought response and proposed a drought rate structure to assist Ventura Water with a full cost recovery of revenue loss during a water shortage.

7. Water Shortage Contingency Plan

It was proposed at the July 7, 2014 City Council Meeting that the existing Water Shortage Contingency Plan, a required section of the City's 2010 Urban Water Management Plan, be updated with community input to provide a framework to address a range of potential events that could result in serious water shortages, including drought, earthquakes or water supply failures. In response, the City Council asked that a Task Force be created to make recommendations to the revision of the Water Shortage Contingency Plan to establish what water shortage actions should be undertaken by the City and its water customers that would be most acceptable and appropriate for Ventura. In addition, the Task Force members were asked to provide a customer perspective of the perceived effectiveness of different incentives to reduce water usage, as well as potential rate options to reduce water use. On March 9, 2015, the City Council approved the Water Shortage Event Contingency Plan prepared by the members of the Water Shortage Task Force which incorporates the agreed policy considerations by the members of the Task Force.

8. Establish Water Dedication and In Lieu Fee Ordinance and Resolution

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. Ventura Water returned to Council in June 2014 and recommended that Council approve the proposed Water Dedication and In-Lieu Fee Ordinance and Resolution, rather than approve the ordinance at that time the Council discussed the formation of a Water Commission to investigate the topic.

9. Water Commission

The City Council approved in January 2015 an ordinance establishing a Water Commission to serve in an advisory capacity to the Council on various policy topics related to water resources. The Council is currently making a decision on the seven member commission following an application and interview process. It is anticipated that City Council will approve the members of the Water Commission at the May 4, 2015, Council Meeting.

5. CONCLUSIONS & RECOMMENDATIONS

A. CONCLUSIONS

The City's total water demand for the most recent calendar year (2014) of data was 16,995 AFY. Over the past five years (2010-2014), the City experienced an average annual water demand of 17,167 AFY, and over the past ten years (2005-2014), the annual average water demand was 18,095 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 17,167 AFY.

The City has a total of 45 projects that are under construction or approved for development that are not utilizing water and are not included in the current baseline water demands. These projects include an additional 838,357 SF of non-residential development and 2,463 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 1,128 AFY. Therefore, the estimated water demands that the City is committed to supply total 18,295 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 2022.

The City's projected available water supply is constantly changing, depending upon environmental and legal constraints. The City's current (normal year) available water supply is 19,600 AFY, however with drought conditions persisting in 2015, the available water supply may drop to 14,888 AFY in 2015 and could drop to an annual average of 13,802 AFY in 2016.

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 409 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 2015

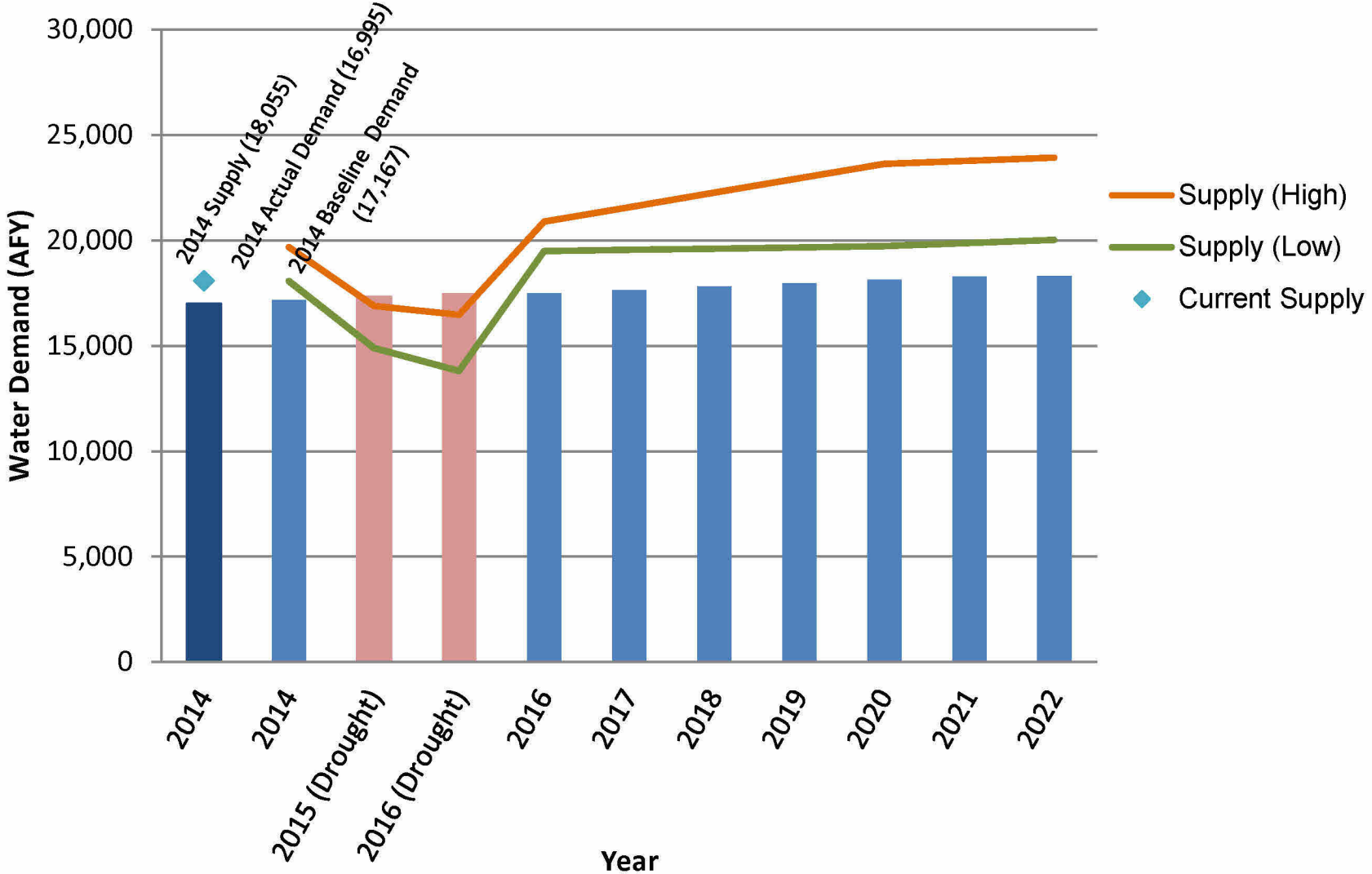
Table 5-1
Demand vs. Supply Comparison

Year	Demand [1]	Supply Range [2]			
		Low		High	
	AFY	AFY	% Diff.	AFY	% Diff.
2014	17,167	18,055	4.9%	19,668	12.7%
2015 (Drought)	17,328	14,888	-16.4%	16,888	-2.6%
2016 (Drought)	17,488	13,802	-26.7%	16,461	-6.2%
2016	17,488	19,484	10.2%	20,884	16.3%
2017	17,648	19,542	9.7%	21,567	18.2%
2018	17,809	19,601	9.1%	22,251	20.0%
2019	17,969	19,659	8.6%	22,934	21.6%
2020	18,129	19,717	8.1%	23,617	23.2%
2021	18,289	19,869	7.9%	23,769	23.1%
2022	18,295	19,869	7.9%	23,890	23.4%

[1] Per Table 3-8.
[2] Per Table 4-2.

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

Figure 5-1
Demand vs. Supply Projection



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 persists 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.