ROLL CALL – WATER COMMISSION

PLEDGE OF ALLEGIANCE

WATER COMMISSION ITEMS

1. MINUTES

RECOMMENDATION

Approve the minutes of the April 23, 2019 regular session.
2. **RESOLUTION UPDATING WATER COMMISSION RULES OF PROCEDURE**

Staff recommends the Water Commission consider and approve a resolution of the Water Commission of the City of San Buenaventura, California, updating the Water Commission Rules of Procedure.

3. **GROUNDWATER SUSTAINABILITY AGENCIES AND SANTA PAULA BASIN TECHNICAL ADVISORY COMMITTEE UPDATE**

Staff recommends the Water Commission receive an oral update on the status of local Groundwater Sustainability Agencies and the Santa Paula Basin Technical Advisory Committee.

4. **FINAL DRAFT 2019 COMPREHENSIVE WATER RESOURCES REPORT**

It is recommended that the Water Commission receive this written report and an oral presentation on the Final Draft 2019 Comprehensive Water Resources Report and recommend approval to the City Council.

5. **WATER COMMISSION CONSIDERATION OF SUMMER SCHEDULE**

Staff recommends the Water Commission retain the regularly scheduled June 25, 2019 and August 27, 2019 meetings, and cancel the July 23, 2019 meeting.
PUBLIC COMMENT

COMMISSIONER COMMUNICATIONS

Per Government Code Section 54954.2(a), the Commissioner Communications section of the agenda provides the Water Commission the opportunity to ask a question for clarification, make a brief announcement, or make a brief report on his or her own activities.

GENERAL MANAGER REPORT

ADJOURNMENT

Administrative Reports relating to this agenda are available in the Ventura Water Office, 336 Sanjon Road, Ventura, during normal business hours as well as on the City's Web Site – www.venturawater.net. Materials related to an agenda item submitted to the Ventura Water Department after distribution of the agenda packet are available for public review at the Ventura Water Office.

This agenda was posted on 5/24/19 at 5:30 p.m. in the City Clerk's Office, on the City Hall Public Notices Board, and on the Internet.

In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact the Ventura Water Office at (805) 652-4587 or the California Relay Service at (866) 735-2929. Notification by 4/19/19 at 5:00 p.m. will enable the City to make reasonable arrangements for accessibility to this meeting.
REGULAR MEETING
TUESDAY, APRIL 23, 2019, 5:30 P.M.
COMMUNITY MEETING ROOM, 501 POLI STREET, VENTURA

Water Commission Purpose: Review and make advisory recommendations regarding water rates, water resources infrastructure projects in the five-year capital improvement program, the integrated water resources management plan, water supply options, the Urban Water Management Plan approval process, a water dedication and in-lieu fee requirement, and other water resource issues.

Commission Chair Hubner called the meeting to order at 5:32

ROLL CALL – WATER COMMISSION

Present: Commissioners Feeney, Mills, McCarty, McCombs, Burton, and Hubner.

Absent: Commissioner McCord and Alternate Commissioner Anderson.

PLEDGE OF ALLEGIANCE

*5:34 p.m. Alternate Commissioner Anderson arrived and participated as a voting Commissioner due to Commissioner McCord’s absence.

WATER COMMISSION ITEMS

1. MINUTES

RECOMMENDATION

Approve the minutes of the March 26, 2019 regular session.

SPEAKER

Members of the Public: None.

Commissioner Burton moved to approve the recommendation.
Commissioner Feeney seconded the motion. The vote was as follows:

AYES: Commissioners Feeney, McCarty, McCombs, Mills, Burton, Hubner and Alternate Commissioner Anderson.
NOES: None.

Commission Chair Hubner declared the motion carried.

2. **REDLINED DRAFT 2019 COMPREHENSIVE WATER RESOURCES REPORT**

It is recommended that the Water Commission:


   b) Consider providing staff direction on additional revisions to the CWRR to address comments.

Members of the Public: Duane Georgeson and Dan Cormode.

Commissioner McCombs moved that the base line demand condition remain using the 10-year average for this year’s Comprehensive Water Resources Report. Commissioner Burton seconded the motion. The vote was as follows:

AYES: Commissioners Feeney, McCombs, Mills, Burton, and Hubner.

NOES: Commissioners McCarty and Alternate Commissioner Anderson.

Commissioner McCombs moved that Table 4-3 remain as is with the second column figures as shown but to the extent that we can provide a better definition of Normal that is cited in the text and that we repeat the definition on the page preceding the footnotes. Commissioner Burton amended the motion to add section 1-F to add a list of definitions to the report leaving it up to staff’s discretion. Commissioner Hubner seconded the motion. The vote was as follows:

AYES: Commissioners Feeney, McCarty, McCombs, Mills, Burton, Hubner and Alternate Commissioner Anderson.

NOES: None.

Commissioner Burton moved for staff to modify table 6-2 consistent with Commissioner Feeney’s comments. Commissioner McCombs seconded the motion. The vote was as follows:

AYES: Commissioners Feeney, McCarty, McCombs, Mills, Burton, Hubner and Alternate Commissioner Anderson.
Commissioner McCombs made a motion that the objective staff was trying to achieve would be better accomplished with a chart or graph visual depiction of the information in Table 6-3. Commissioner McCombs modified the motion that in addition to the Table 6-3 data that Commissioner Mills thinks is important to see that staff include whatever visual presentation that best illustrates the discussion heard on behalf of the Commissioners. Commissioner Hubner seconded the motion. The vote was as follows:

AYES: Commissioners Feeney, McCarty, McCombs, Mills, Burton, Hubner and Alternate Commissioner Anderson.

NOES: None.

Commissioner Burton moved to amend the sentence in Section 4 – “Water Supply Section”, number 7. VenturaWaterPure heading, page 4-19, second paragraph to read, “The pilot facility operated for 9 months and produced favorable results, indicating highly reliable purification technologies, providing information on operational needs and costs, and the absence of risk to the public health and safety.” Alternate Commissioner Anderson seconded the motion. The vote was as follows:

AYES: Commissioners Feeney, McCarty, McCombs, Mills, Burton, Hubner and Alternate Commissioner Anderson.

NOES: None.

PUBLIC COMMENT

None.

COMMISSIONER COMMUNICATIONS

Alternate Commissioner Anderson inquired about Commissioner Terms to which Commission Chair Hubner shared the City Council approvals that were made at the April 8, 2019 meeting in regard to staggering future terms and eliminating the Alternate positions. Commission Chair Hubner also mentioned the Commissioner recruitment is underway.

GENERAL MANAGER REPORT

- The General Manager mentioned the CEQA training that occurred at the City Council Meeting April 8, 2019.
- The recruitment of the Commission positions which close on May 17, 2019.
- The General Manager announced the recruitment of the Commission positions which close on May 17, 2019.
- The State Water Short Term allocation agreement terms with San Gorgonio need to be revised and will be brought back to the Water Commission next month.
- Congratulated Mile Ellis with United Water Conservation District in the audience who is retiring next week.

ADJOURNMENT: 7:42 P.M.
To: Ventura Water Commission

From: Susan Rungren, Interim Ventura Water General Manager
Miles Hogan, Assistant City Attorney II – Water

Subject: Resolution Updating Water Commission Rules of Procedure

RECOMMENDATIONS

Staff recommends the Water Commission consider and approve a resolution of the Water Commission of the City of San Buenaventura, California, updating the Water Commission Rules of Procedure.

PREVIOUS MEETINGS


August 28, 2018 – the Water Commission approved Resolution No. 2018-001, updating the Water Commission Rules of Procedure with the new regular meeting start time of 5:30 P.M. and correcting minor, clerical errors.

DISCUSSION

At several of the most recent Water Commission Regular Meetings, Commissioners provided informal feedback regarding potential changes to the Rules of Procedures. At the March 26, 2019 Water Commission Regular Meeting, Chair Hubner requested staff return at a future meeting with an agenda item proposing changes to the Rules of Procedure. Ventura Water staff and Commission legal staff took recommendations from Chair Hubner and evaluated potential changes with the City Clerk’s Office.

In July 2010, the City Council adopted a Council Advisory Groups Handbook, which is publicly available in the City Clerk’s section of City’s website. The Water Commission Rules of Procedure cannot be inconsistent with the provisions of that handbook. Relevant excerpts are provided in the discussion below. It is important to note that at some point the City Council might adopt a uniform set of rules of procedure for all the Council Advisory Groups. Staff does not have a timeline of when that could occur.

Another consideration in evaluating changes to the Rules of Procedure is that any action by the Water Commission that causes the City to incur additional costs or expenses would
require approval by the City Council. For example, if a change to the Rules of Procedure required significantly more City Staff time to implement the rule change, then that is a cost burden that would need to be approved by City Council.

The proposed updated Rules of Procedure are included as Attachment A, a redline reflecting proposed changes is included as Attachment B, and a proposed Resolution 2019-001 adopting the updated Rules of Procedure is included as Attachment C.

**Recording of Meetings and Meeting Minutes**

City Staff understand that a primary goal with requesting changes to the Rules of Procedure is to ensure that the public and City Council have a better understanding of the discussion that takes place at Water Commission Meetings. This led to requests to evaluate changes to the recording of meetings and meeting minutes.

Regarding recording of meetings, the Rules of Procedure currently provide:

3.1 Recording of Meetings

Meetings will generally be recorded by electronic device (e.g., digitally, audio cassette or video tape or other media) and preserved for a period of two (2) years or as may be otherwise specified by the City Council in its adoption of City-wide records retention policies. When a request is made in writing to the Secretary of the Commission, a copy of any such recording may be purchased at its reproduction cost.

The Council Advisory Groups Handbook provides, in relevant part:

**Recordings of Meetings** – If meetings are recorded, the department maintains the recording in accordance with the City’s adopted retention schedule.

Currently, recording of meetings is conducted on a handle-held audio recording device, which does not produce high quality records. Based on discussions with the City Clerk’s Office, it is Staff’s understanding that a higher-quality audio recording of meetings and additional microphones set up in front of Water Commissioners could be provided at no additional cost to the City. This format would likely require an additional hour of Ventura Water Staff time for set up and an additional hour for take down of the audio recording equipment. This is within the realm of expected time for staffing the Water Commission Meetings and would not require additional City Council approval. If it takes considerably more time than expected, Staff can report back to the Water Commission for potential changes for consideration.

Therefore, Staff’s plan is to modify the recording equipment for Water Commission Meetings beginning with the next Regular Meeting, expected to be held in June 2019.

For purposes of this agenda item, Staff propose adding the following sentence to Rule 3.1, shown in underline below:
3.1 Recording of Meetings

Meetings will generally be recorded by electronic device (e.g., digitally, audio cassette or video tape or other media) and preserved for a period of two (2) years or as may be otherwise specified by the City Council in its adoption of City-wide records retention policies. When a request is made in writing to the Secretary of the Commission, a copy of any such recording may be purchased at its reproduction cost. Audio recording(s) of meetings will be posted on the City’s website, starting with the June 2019 meeting.

If this rule change is adopted, Staff will make every effort to post the audio recording(s) as soon as possible before the next Meeting. Staff are recommending that recordings be posted starting with the recording of the June 2019 Meeting so that people are on notice that the recording including their comments will be posted to the City’s website, and due to the poor quality of existing audio recordings.

Regarding minutes, several Water Commissioners requested more detailed minutes of Water Commission Meetings. The Rules of Procedure currently provide:

3.2 Action Minutes

Minutes of the Water Commission will be action minutes. Action minutes include all motions and final motions reflecting the vote of each member present and voting. Staff recommendations subject to a motion will be included in the minutes. The minutes will also reflect the names of public speakers. Water Commission and City staff discussion and comments will not be included in the minutes. Minutes of all meetings are required to be kept by the Department. Generally, minutes are submitted to the Water Commission at the next regular meeting; and they are made available to the City Council.

The Council Advisory Groups Handbook provides, in relevant part:

Action Minutes – Minutes of Council Advisory Group meetings will be action minutes. Action minutes include final motions with votes. The minutes will also reflect the names of public speakers. Council Advisory Group and City staff discussion and comments will not be included in the minutes. Minutes of all meetings are required to be kept by the department. Generally, minutes are submitted to the Council Advisory Group within two weeks for approval or at the next regular meeting; and they are made available to the City Council.

Based on the above, the Water Commission cannot have minutes that require inclusion of discussion and comments. Based on discussions with the City Clerk’s Office, it is Staff’s understanding the City Council adopted action minutes procedures to save the expense that more detailed minutes would require of staff resources and because the public is able to review recordings of City Council Meetings. Therefore, by posting audio recordings of
Water Commission Meetings to the City's website, Staff anticipate that these objectives would be achieved.

**Speaker Time Limits**

Chair Hubner requested that Staff evaluate eliminating the five (5) minute cumulative time limit for speaker comments per Meetings, leaving a limit of three (3) minutes for each item on the agenda. Staff support this proposal and recommend the following changes to the Rules of Procedure, shown with strikethrough for deletions and underline for additions:

3.4 Oral Presentation - Time Limits, and Number of Speakers

[...]

(c) In order to conduct orderly and timely meetings, oral presentations by the public may not exceed a cumulative total of five (5) minutes for a single meeting. Members of the public making oral presentations to the Commission in connection with one or more agenda items at a single meeting are limited to three (3) minutes on any agenda item with a cumulative total of five (5) minutes for all agenda items at such meeting unless otherwise provided. If the Chairperson deems it appropriate, in extraordinary circumstances he or she may extend the time limit for any speaker. The Chairperson may also limit the time provided to speakers in order to ensure an orderly and timely meeting. Except when necessary for immediate clarification of a particular point, no person shall be allowed to speak a second time until all others wishing to be allowed to speak have had an opportunity to do so, and then only at the discretion of the Chairperson.

[...]

**Agenda Item Requests**

Chair Hubner requested that Staff evaluate including in the Rules of Procedure an explanation of the process for a Commissioner requesting an item be put on the agenda. Currently, the process is not explicitly laid out in the Rules of Procedures.

The Council Advisory Groups Handbook provides, in relevant part:

*Getting an Item on the Agenda* - Council Advisory Group members can request that an item be placed on a future agenda by bringing it up at a regular meeting under Council Advisory Group Communications. The Council Advisory Group will make a determination if the item should be agendized and at what meeting.

Staff support this proposal and recommend the following changes to the Rules of Procedure, shown with strikethrough for deletions and underline for additions:
1.6 Agendas

At least 72 hours before a regular meeting, copies of the City Water Commission’s agenda shall be posted within the public display case at the rear entrance to City Hall and made available to any person at the public counter in the City Clerk’s Division. In accordance with the Brown Act, the Commission may not discuss or take action on any item that did not appear on the posted agenda unless an exception is made, as permitted under Government Code Section 54954.2.

The General Manager, in cooperation with the Chairperson, shall prepare the agenda for each regular and special meeting of the Commission. A Commissioner can request that an item be placed on a future agenda by bringing it up at a regular meeting under Commissioner Communications, and the Commission shall make a determination if the item should be agendized and at what meeting. In addition, any Commissioner may contact the General Manager in writing with a copy to the Chairperson and request an item to be placed on the regular meeting agenda no later than 5 p.m. eleven (11) calendar days prior to the meeting date, but the General Manager shall be under no obligation to include the requested item on the next regular meeting agenda and shall explain at the meeting why the requested item was not included in the agenda.

ALTERNATIVES

Below are alternatives for Water Commission consideration:
  a) Adopt Staff’s recommendation.
  b) Adopt a modified version of Staff’s recommendation based on Commissioner feedback.
  c) Direct staff to conduct further study and return at a future meeting with proposed changes to the Rules of Procedure.
  d) Do not adopt Staff’s recommendation and leave the Rules of Procedure as-is.

Prepared by Susan Rungen and Miles Hogan

[Signatures]

Interim Ventura Water General Manager

Assistant City Attorney II – Water

Attachments:

A. Proposed Updated Water Commission Rules of Procedure
B. Redline Reflecting Proposed Changes to Rules of Procedure
C. Proposed Water Commission Resolution No. 2019-001
ATTACHMENT A
PROPOSED UPDATED WATER COMMISSION RULES OF PROCEDURE
RULES OF PROCEDURE
FOR THE CONDUCT OF BUSINESS ON WATER MATTERS BEFORE
THE WATER COMMISSION OF THE
CITY OF SAN BUENAVENTURA
CONTENTS

1. Meetings, Study Sessions, Agendas and Staff Reports
   1.1 Regular Meetings
   1.2 Special Meetings
   1.3 Adjourned Meetings
   1.4 Workshop Sessions
   1.5 Open Sessions
   1.6 Agendas
   1.7 Staff Reports
   1.8 Staff Communications

2. Reserved

3. Presentation of Agenda Items
   3.1 Recording of Meetings
   3.2 Action Minutes
   3.3 Order of Presentation
   3.4 Oral Presentations, Time Limits, and Number of Speakers
   3.5 Written Materials
      3.5.1 Copying and Distribution
      3.5.2 Regular Submissions
      3.5.3 Responding Submissions
      3.5.4 Day of Meeting Submissions
      3.5.5 Non-complying Submissions
      3.5.6 Written Errata Memos
   3.6 Questioning of Speakers
   3.7 Changes to Agenda Order

4. Motions
   4.1 Motions-Second
   4.2 Amendment of Motion or Substitute Motion
   4.3 Withdrawal of Motion or Second
   4.4 Reserved
   4.5 Discussion, Closure, and Question
   4.6 Motions for Reconsideration
5. Decision-Making

5.1 Voting
   5.1.1 Tie Votes
   5.1.2 Abstentions
   5.1.3 Roll Call
   5.1.4 Motions Include Staff Recommendations
   5.1.5 Absentees
   5.1.6 Alternates

5.2 Continuances

6. Construction and Effect

   6.1 Construction
   6.2 Chairperson's Rules of Order
   6.3 Conflicts of Interest

7. Secretary of the Commission

   7.1 Ventura Water Department General Manager Shall Serve as Secretary
1. MEETINGS, STUDY SESSIONS, AGENDAS AND STAFF REPORTS

1.1 Regular Meetings

Regular meetings of the City Water Commission shall be held on the fourth Tuesday of each month. If the regular meeting date falls on a City holiday, then the meeting shall be rescheduled by the Secretary of the Commission. All regular meetings of the City Water Commission will be called to order at 5:30 p.m. in the Community Meeting Room at City Hall located at 501 Poli Street, Ventura, California, unless advertised otherwise, cancelled or rescheduled. The Commission will generally adjourn its meetings at 9:00 p.m., with any unfinished business being continued to the next regular meeting. The Commission will not hear any new item after 9:00 p.m. without unanimous agreement of the entire Commission present at that meeting.

1.2 Special Meetings

An emergency or special meeting may be called at any time by the Chairperson of the City Water Commission, or by a majority of its membership. Written notice shall be delivered personally or by email at least twenty-four (24) hours before the time of a special meeting, and as soon as is reasonably possible in the case of an emergency meeting to each member and to each local newspaper of general circulation, and to each radio or television station which has previously submitted a written request for notice. The notice shall specify the time and place of the special meeting and the business to be transacted. No other business shall be considered at the meeting. Written notice may be dispensed with as to any member who at or before the time of the meeting files a written waiver of notice with the Secretary of the Commission. Written notice will also be dispensed with as to any member who is actually present at the meeting at the time it convenes.

1.3 Adjourned Meetings

The City Water Commission may adjourn any regular, adjourned regular, special or adjourned special meeting to a time and place
specified in the order of adjournment pursuant to the procedures set forth in the Ralph M. Brown Act, Government Code Section 54950, et seq. (the "Brown Act").

1.4 Workshop Sessions

The City’s Water Commission may hold a workshop session as part of a regular, adjourned or special meeting. In general, the purpose of workshop sessions will be to gather information from staff, consultants, or members of the public regarding matters within the purview of the Water Commission and, at most, provide further direction to staff while not rendering a formal final decision or action on a particular matter. When a matter is set for a workshop session, the time allowed for individual public testimony time limits may be reasonably limited at the discretion of the Chairperson. Public notice for workshop sessions on specific matters for which future meetings are anticipated shall be given to all interested parties who have requested such notice, and a record of the workshop session shall be entered into the minutes of any future meetings as consideration of information in any pertinent future discussion.

1.5 Open Sessions

All meetings of the City Water Commission shall be open and public, and all persons shall be permitted to attend.

1.6 Agendas

At least 72 hours before a regular meeting, copies of the City Water Commission’s agenda shall be posted within the public display case at the rear entrance to City Hall and made available to any person at the public counter in the City Clerk’s Division. In accordance with the Brown Act, the Commission may not discuss or take action on any item that did not appear on the posted agenda unless an exception is made, as permitted under Government Code Section 54954.2.

The General Manager, in cooperation with the Chairperson, shall prepare the agenda for each regular and special meeting of the Commission. A Commissioner can request that an item be placed on a future agenda by bringing it up at a regular meeting under
Commissioner Communications, and the Commission shall make a
determination if the item should be agendized and at what meeting.
In addition, any Commissioner may contact the General Manager in
writing with a copy to the Chairperson and request an item to be
placed on the regular meeting agenda no later than 5 p.m. eleven
(11) calendar days prior to the meeting date, but the General
Manager shall be under no obligation to include the requested item
on the next regular meeting agenda and shall explain at the meeting
why the requested item was not included in the agenda.

1.7 Staff Reports

When staff reports exist, copies shall be made available electronically
or in hardcopy format at least 72 hours prior to a regular public
meeting. Copies shall also be made available at the regular public
meeting. If more members of the public request more copies of the
staff report than are available at the meeting, copies shall be provided
to those members of the public as soon as reasonably possible after
the meeting in a manner consistent with the Public Records Act.
Staff reports shall be prepared with recommendations and the basis
for recommendations, and included in the meeting record.

1.8 Staff Communications

Water Commissioners may contact staff for clarification of staff
materials and to ask questions prior to and at public meetings. The
General Manager or staff shall have discretion to respond directly to a
Water Commissioner. If the General Manager or staff determines
that the question would benefit all of the Water Commissioners and
members of the public, staff is to A) Provide a written clarifying
statement restating or summarizing the question and providing an
answer to all Water Commissioners prior to a meeting and to verbally
share the clarifying statement at the appropriate public meeting; or B)
Provide a verbal clarifying statement restating or summarizing a
Water Commissioner's question and providing an answer during the
staff presentation at the appropriate public meeting.

2. RESERVED
3. PRESENTATION OF AGENDA ITEMS

3.1 Recording of Meetings

Meetings will generally be recorded by electronic device (e.g., digitally, audio cassette or video tape or other media) and preserved for a period of two (2) years or as may be otherwise specified by the City Council in its adoption of City-wide records retention policies. When a request is made in writing to the Secretary of the Commission, a copy of any such recording may be purchased at its reproduction cost. Audio recording(s) of meetings will be posted on the City’s website, starting with the June 2019 meeting.

3.2 Action Minutes

Minutes of the Water Commission will be action minutes. Action minutes include all motions and final motions reflecting the vote of each member present and voting. Staff recommendations subject to a motion will be included in the minutes. The minutes will also reflect the names of public speakers. Water Commission and City staff discussion and comments will not be included in the minutes. Minutes of all meetings are required to be kept by the Department. Generally, minutes are submitted to the Water Commission at the next regular meeting; and they are made available to the City Council.

3.3 Order of Presentation

The procedure for the conduct of meetings is generally as follows:

(a) The Chairperson opens the meeting and announces the first and subsequent items.
(b) City staff presents its report, including any recommendation.
(c) Questions of staff by members of the Water Commission.
(d) Oral presentations by members of the public, per Section 3.4.
(e) Water Commission deliberates on the issue and can ask staff any questions for clarification.
(f) The Water Commission deliberates and takes action.
3.4 Oral Presentation - Time Limits, and Number of Speakers

(a) Prior to the meeting, or during the meeting prior to a matter being reached, persons wishing to address the Water Commission should fill out a speaker card and submit it to the City Water Staff. Those desiring not to provide their name should see Ventura Water staff for further instructions on how this can be accommodated.

(b) Any person desiring to address the Commission must first be recognized by the Chairperson. All comments should be made clearly and audibly and all speakers should first state their full names and City of residence and the names of any persons in whose behalf they are appearing.

(c) In order to conduct orderly and timely meetings, members of the public making oral presentations to the Commission in connection with one or more agenda items at a single meeting are limited to three (3) minutes on any agenda item unless otherwise provided. If the Chairperson deems it appropriate, in extraordinary circumstances he or she may extend the time limit for any speaker. The Chairperson may also limit the time provided to speakers in order to ensure an orderly and timely meeting. Except when necessary for immediate clarification of a particular point, no person shall be allowed to speak a second time until all others wishing to be allowed to speak have had an opportunity to do so, and then only at the discretion of the Chairperson.

(d) In order to expedite matters and to avoid repetitious presentations, the designation of a spokesperson is encouraged.

Whenever any group of persons, all of whom are present, wishes to address the Commission on the same subject matter, the group is encouraged to designate a spokesperson to address the Commission. Each member of the group shall complete a speaker card in advance of
the matter being called and shall note on the card the person whom they wish to have speak on their behalf. By allowing another person to speak on their behalf, each group member shall relinquish their right to speak on the matter. With the consent of a majority of the Commissioners present, the Chairperson may then extend the time allocation for the designated spokesperson from three (3) minutes up to a maximum of ten (10) minutes depending upon how many cards have been submitted.

(e) Persons who anticipate oral presentations exceeding five (5) minutes are encouraged to submit comments in writing, in advance of the meeting, care of the General Manager, for prior distribution to the Commission.

(f) Comment cards may be used by members of the public who do not wish to or cannot verbally address the Commission during a meeting. A person may indicate their comments and their opposition or support for an agenda item on a comment card prior to or during the Commission's consideration of the item.

During the public testimony of the item, the Chairperson will indicate that the Commission has received comment cards from (name of person) in support of the project or issue and comment cards from the (name of person) in opposition of the project or issue. The minutes will reflect the Commission's receipt of comment cards in opposition and support of a proposed project or other subject.

(g) Any person addressing the Commission may present a PowerPoint software or other visual media presentation to the Commission utilizing the City's audio/visual equipment.

i. All PowerPoint presentations must comply with the applicable time limits for oral presentations and cumulative time limits. Presentations should be
planned with flexibility to adjust to any changes in these time limits.

ii. Each slide of the PowerPoint presentation must identify that this is the "Personal Comments of Private Citizen [first and last name]."

iii. All PowerPoint presentations must be submitted on suitable media already formatted in PowerPoint format and be submitted to the General Manager no later than noon the day before of the Water Commission meeting to allow for virus checks and compatibility with City equipment.

iv. Any discs, flash drives, or other media submitted that are thought to contain viruses or unable to be scanned for viruses by City equipment will not be permitted to be used.

v. If compatibility or viruses are at issue, a member of the public may provide ten (10) printed hard copies of the PowerPoint presentation during their presentation.

(h) Any of the time limits in this section may be reduced at the discretion of the Chairperson, or a majority of the Commission present, if determined necessary or desirable for the efficient and orderly conduct of the meeting.

3.5 Written Materials

Members of the public who may not be able to attend a meeting may submit letters or written comments. The written information from members of the public not at the meeting shall be presented to the Water Commission before the meeting and if received prior to the day of the meeting will be sent to the Commissioners via email if possible.
Members of the public who wish to submit written information at the meeting should provide twenty (20) copies of the information in order to assure it is considered by the Commission.

Water Commission adopted the following policy regarding written submissions to ensure that it has reasonable and appropriate opportunity to review materials.

3.5.1 Copying and Distribution

The submitting party must provide twenty (20) copies to the Water Commission Secretary; the Commission Secretary will not make copies. The Commission Secretary will distribute all complying submissions, as defined below. Non-complying submissions will be stamped, filed, and not distributed.

3.5.2 Regular Submissions

All materials delivered in advance of the staff report becoming publicly available, must be submitted ten (10) days prior to the Water Commission meeting. Twenty (20) copies of the materials must be delivered or mailed to the Commission Secretary at City of Ventura Maintenance Yard, 336 Sanjon Road, Ventura, CA 93002. The Commission Secretary will send these submissions to the Water Commission together with the staff reports.

3.5.3 Responding Submissions

All materials delivered in response to either the staff report or responding submissions must be submitted no later than thirty (30) hours before the Commission meeting. Submissions, including exhibits, may not exceed ten (10) pages and twenty (20) copies must be sent to the Commission Secretary at City of Ventura Maintenance Yard, 336 Sanjon Road, Ventura, CA 93002. The Commission Secretary will deliver these submissions to the City Water Commission within 24 hours of receipt. Electronic submissions may be sent to venturawatercommission@venturawater.net.
The City will under no circumstances make copies of any document longer than ten (10) pages in length, but may do so in its sole discretion if it is feasible given the time and cost of doing so.

3.5.4 Day of Meeting Submissions

Day of meeting submissions may not be more than two (2) written pages, including exhibits. Twenty copies of the submission must be given to the Commission Secretary who will distribute them to the Water Commission when the agenda item is called. A reasonable number of photographs, posters, and short [(five (5) minutes maximum)] presentations will be accepted no later than 5:00 p.m. on the day of hearing. The City will under no circumstances make copies of any document longer than two (2) pages in length, but may do so in its sole discretion if it is feasible given the time and cost of doing so.

3.5.5 Non-complying Submissions

Submissions, which do not fall within the above prescriptions, will be entered into the record and not delivered to the Water Commission. These submissions will be stamped "File Copy. Non-Complying Submission", and placed into the official case file. The Water Commission will be under no obligation to consider the information contained in any non-complying submission.

3.5.6 Written Errata Memo

An Errata Memo is a change to the staff report that describes the change to the Commissioners. This errata memo will be provided to the Commissioners on the dais prior to the start of the meeting.

3.6 Questioning of Speakers

Any person other than a Commissioner desiring to direct a question to a speaker or staff member shall submit the question to the Chairperson, who shall determine whether the question is relevant to
the subject at hand and whether or not it should be answered by the speaker or staff member. Direct questioning of speakers or staff members may be allowed in extraordinary circumstances, only at the discretion of the Chairperson.

3.7 Changes to Agenda Order

The Water Commission Chairperson shall, prior to consideration of the meeting agenda, poll Commissioners on the movement of agenda items for consideration. The movement or order of agenda items may be changed upon the majority approval of the Commission.

4. MOTIONS

4.1 Motions - Second

Any member may propose action upon an agenda item – including an order, resolution, ordinance, or any other action of the City Water Commission by a motion. Before a motion can be considered or debated it must be seconded, at which time it shall be on the floor and must be considered. If not seconded, the motion is lost for lack of a second and shall be so declared by the Chairperson.

4.2 Amendment of Motion or Substitute Motion

A motion on the floor may be amended at any time before adoption or rejection. When an amendment is offered, the Water Commission will debate and take action on the amendment before acting on the original motion. If the amendment is not adopted, the original motion will then be considered. If the amendment is adopted, the original motion as amended will then be considered.

4.3 Withdrawal of Motion or Second

A motion may be withdrawn by the maker at any time before adoption or rejection, with consent of the second. A second to a motion may be withdrawn by the seconding member at any time before adoption or rejection of the motion. The motion will then be lost for lack of a second and so declared by the Chairperson unless seconded by another Commissioner.
4.4 Reserved

4.5 Discussion, Closure, and Question

After a motion has been seconded, any member may discuss or comment on the subject of the motion. The Chairperson will recognize members of the Water Commission with the desire to speak, beginning with the motion's maker, and will protect each speaker from disturbance or interference. When no member wishes to discuss or comment further, the Chairperson shall call for a vote on the motion. Any member of the Water Commission may at any time move to close the debate.

4.6 Motions for Reconsideration

Any member who was present and voted with the prevailing majority on a matter to be reconsidered may make motions for reconsideration of a matter. Any member of the Water Commission may second a motion to reconsider. Motions to reconsider shall be made at the same meeting as the original motion or at the next succeeding meeting. A reconsideration motion at the next succeeding meeting shall be agendized for discussion and action at the next meeting, consistent with the Brown Act.

5. DECISION-MAKING

5.1 Voting

Approval of any motion brought before the City Water Commission shall require the affirmative vote of a majority of the members present and voting, unless otherwise specified by law.

5.1.1 Tie Votes

Any tie vote shall constitute a denial of the motion and may be reconsidered by a motion offered by any member who voted on the matter. If there is no action by an affirmative majority vote, the result is no action.
5.1.2 Abstentions

Abstentions shall not count as votes for the purpose of determining whether there has been an affirmative vote of a majority of the members present, but shall be counted for the purpose of determining whether a quorum is present, unless the member is abstaining because of a potential conflict of interest in the matter at hand.

5.1.3 Roll Call

Voting upon a motion may be by roll call or electronic means.

5.1.4 Motions Include Staff Recommendations

A motion to adopt or approve staff recommendations or simply to approve the action under consideration shall, unless otherwise particularly specified, be deemed to include adopting of all related actions recommended in the staff report on file on the matter.

5.1.5 Absentees

A City Water Commission member who is absent from any portion of a public meeting may vote on the matter at the time it is acted upon, provided that he or she has listened to a recording of the entire portion of the meeting from which he or she was absent, if such a tape recording exists, and if he or she has examined all of the exhibits presented during the portion of the meeting from which he or she was absent and states for the record before voting that the member deems himself or herself to be familiar with the record and with the information presented at the meeting as he or she would have been had he or she personally attended the entire meeting.

5.1.6 Alternates

Alternates shall only vote when one or more members in their respective category (Professional or Demonstrated Special Interest) is absent. In addition, alternates shall only vote if they
believe they have acquired and understand the information that has been provided to the Water Commission for any relevant water matter. Alternates shall endeavor to attend all meetings, even if they are not planning to vote in the absence of a regular Commissioner. Alternates are not permitted to be included in the Commission discussion of agenda items at a meeting unless they will be voting at that meeting. Alternates are permitted to speak during public comment and submit questions for the Chairperson to consider.

Alternates are expected to follow the Brown Act requirements as if they were sitting commissioners. Alternates are not permitted to discuss agenda items with a majority of other members of the Water Commission outside of a noticed public meeting and shall base their vote when sitting as a voting member of the Commission on their own opinion or belief.

5.2 Continuances

Upon a showing of good cause and by request of staff, member of the public, or member of the City Water Commission, the Chairperson, at the time set for a meeting on a particular item, may, with the concurrence of a majority of the commissioners present, order the agenda item to be continued to a specified date and time. Upon the request of any member of the City Water Commission, continuance decisions shall be made by roll call vote of all members present.

6. CONSTRUCTION AND EFFECT

6.1 Construction

These procedural rules shall be construed and applied so as to ensure public input and to facilitate an orderly analysis of water matters by the City Water Commission.

6.2 Chairperson’s Rule of Order

When there is no provision of these rules of procedure applicable to the conduct of the meeting of the Water Commission, or to a
particular question of conduct or order that may arise in the course of such meeting, the Chairperson shall suggest appropriate rules for consideration by the entire Commission. The Commission will, in turn, based upon a majority vote of those members present, adopt an ad hoc rule for any questions of conduct or point of order that may arise. In the event of a tie vote on any such ad hoc rule, the Chairperson's decision on the proposed ad hoc rule shall be final.

6.3 Conflicts of Interest

Water Commissioners that have a conflict of interest with any particular agenda item shall be required to abstain from discussion and vote. Said Commissioner shall inform the Commission prior to discussion of any item on which the Commissioner has a conflict of interest and have the reason noted in the record.

7. SECRETARY OF THE COMMISSION

7.1 Ventura Water General Manager Shall Serve as Secretary

Pursuant to San Buenaventura Municipal Code Section 2.460.010, the Ventura Water General Manager shall serve as the Commission Secretary and custodian of its records. The Secretary shall have no vote.
ATTACHMENT B

REDLINE REFLECTING
PROPOSED CHANGES TO RULES
OF PROCEDURE
RULES OF PROCEDURE
FOR THE CONDUCT OF BUSINESS ON WATER MATTERS BEFORE
THE WATER COMMISSION OF THE
CITY OF SAN BUENAVENTURA
CONTENTS

1. Meetings, Study Sessions, Agendas and Staff Reports
   1.1 Regular Meetings
   1.2 Special Meetings
   1.3 Adjourned Meetings
   1.4 Workshop Sessions
   1.5 Open Sessions
   1.6 Agendas
   1.7 Staff Reports
   1.8 Staff Communications

2. Reserved

3. Presentation of Agenda Items
   3.1 Recording of Meetings
   3.2 Action Minutes
   3.3 Order of Presentation
   3.4 Oral Presentations, Time Limits, and Number of Speakers
   3.5 Written Materials
      3.5.1 Copying and Distribution
      3.5.2 Regular Submissions
      3.5.3 Responding Submissions
      3.5.4 Day of Meeting Submissions
      3.5.5 Non-complying Submissions
      3.5.6 Written Errata Memos
   3.6 Questioning of Speakers
   3.7 Changes to Agenda Order

4. Motions
   4.1 Motions-Second
   4.2 Amendment of Motion or Substitute Motion
   4.3 Withdrawal of Motion or Second
   4.4 Reserved
   4.5 Discussion, Closure, and Question
   4.6 Motions for Reconsideration
5. Decision-Making

5.1 Voting
   5.1.1 Tie Votes
   5.1.2 Abstentions
   5.1.3 Roll Call
   5.1.4 Motions Include Staff Recommendations
   5.1.5 Absentees
   5.1.6 Alternates

5.2 Continuances

6. Construction and Effect

6.1 Construction
6.2 Chairperson's Rules of Order
6.3 Conflicts of Interest

7. Secretary of the Commission

7.1 Ventura Water Department General Manager Shall Serve as Secretary
1. MEETINGS, STUDY SESSIONS, AGENDAS AND STAFF REPORTS

1.1 Regular Meetings

Regular meetings of the City Water Commission shall be held on the fourth Tuesday of each month. If the regular meeting date falls on a City holiday, then the meeting shall be rescheduled by the Secretary of the Commission. All regular meetings of the City Water Commission will be called to order at 5:30 p.m. in the Community Meeting Room at City Hall located at 501 Poli Street, Ventura, California, unless advertised otherwise, cancelled or rescheduled. The Commission will generally adjourn its meetings at 9:00 p.m., with any unfinished business being continued to the next regular meeting. The Commission will not hear any new item after 9:00 p.m. without unanimous agreement of the entire Commission present at that meeting.

1.2 Special Meetings

An emergency or special meeting may be called at any time by the Chairperson of the City Water Commission, or by a majority of its membership. Written notice shall be delivered personally or by email at least twenty-four (24) hours before the time of a special meeting, and as soon as is reasonably possible in the case of an emergency meeting to each member and to each local newspaper of general circulation, and to each radio or television station which has previously submitted a written request for notice. The notice shall specify the time and place of the special meeting and the business to be transacted. No other business shall be considered at the meeting. Written notice may be dispensed with as to any member who at or before the time of the meeting files a written waiver of notice with the Secretary of the Commission. Written notice will also be dispensed with as to any member who is actually present at the meeting at the time it convenes.

1.3 Adjourned Meetings

The City Water Commission may adjourn any regular, adjourned regular, special or adjourned special meeting to a time and place
specified in the order of adjournment pursuant to the procedures set forth in the Ralph M. Brown Act, Government Code Section 54950, et seq. (the "Brown Act").

1.4 Workshop Sessions

The City’s Water Commission may hold a workshop session as part of a regular, adjourned or special meeting. In general, the purpose of workshop sessions will be to gather information from staff, consultants, or members of the public regarding matters within the purview of the Water Commission and, at most, provide further direction to staff while not rendering a formal final decision or action on a particular matter. When a matter is set for a workshop session, the time allowed for individual public testimony time limits may be reasonably limited at the discretion of the Chairperson. Public notice for workshop sessions on specific matters for which future meetings are anticipated shall be given to all interested parties who have requested such notice, and a record of the workshop session shall be entered into the minutes of any future meetings as consideration of information in any pertinent future discussion.

1.5 Open Sessions

All meetings of the City Water Commission shall be open and public, and all persons shall be permitted to attend.

1.6 Agendas

At least 72 hours before a regular meeting, copies of the City Water Commission's agenda shall be posted within the public display case at the rear entrance to City Hall and made available to any person at the public counter in the City Clerk’s Division. In accordance with the Brown Act, the Commission may not discuss or take action on any item that did not appear on the posted agenda unless an exception is made, as permitted under Government Code Section 54954.2.

The General Manager, in cooperation with the Chairperson, shall prepare the agenda for each regular and special meeting of the Commission. A Commissioner can request that an item be placed on a future agenda by bringing it up at a regular meeting under
Commissioner Communications, and the Commission shall make a determination if the item should be agendized and at what meeting. In addition, any Commissioner may contact the General Manager in writing with a copy to the Chairperson and request an item to be placed on the regular meeting agenda no later than 5 p.m. eleven (11) calendar days prior to the meeting date, but the General Manager shall be under no obligation to include the requested item on the next regular meeting agenda and shall explain at the meeting why the requested item was not included in the agenda.

1.7 Staff Reports

When staff reports exist, copies shall be made available electronically or in hardcopy format at least 72 hours prior to a regular public meeting. Copies shall also be made available at the regular public meeting. If more members of the public request more copies of the staff report than are available at the meeting, copies shall be provided to those members of the public as soon as reasonably possible after the meeting in a manner consistent with the Public Records Act. Staff reports shall be prepared with recommendations and the basis for recommendations, and included in the meeting record.

1.8 Staff Communications

Water Commissioners may contact staff for clarification of staff materials and to ask questions prior to and at public meetings. The General Manager or staff shall have discretion to respond directly to a Water Commissioner. If the General Manager or staff determines that the question would benefit all of the Water Commissioners and members of the public, staff is to A) Provide a written clarifying statement restating or summarizing the question and providing an answer to all Water Commissioners prior to a meeting and to verbally share the clarifying statement at the appropriate public meeting; or B) Provide a verbal clarifying statement restating or summarizing a Water Commissioner’s question and providing an answer during the staff presentation at the appropriate public meeting.

2. RESERVED
3. PRESENTATION OF AGENDA ITEMS

3.1 Recording of Meetings

Meetings will generally be recorded by electronic device (e.g., digitally, audio cassette or video tape or other media) and preserved for a period of two (2) years or as may be otherwise specified by the City Council in its adoption of City-wide records retention policies. When a request is made in writing to the Secretary of the Commission, a copy of any such recording may be purchased at its reproduction cost. Audio recording(s) of meetings will be posted on the City’s website, starting with the June 2019 meeting.

3.2 Action Minutes

Minutes of the Water Commission will be action minutes. Action minutes include all motions and final motions reflecting the vote of each member present and voting. Staff recommendations subject to a motion will be included in the minutes. The minutes will also reflect the names of public speakers. Water Commission and City staff discussion and comments will not be included in the minutes. Minutes of all meetings are required to be kept by the Department. Generally, minutes are submitted to the Water Commission at the next regular meeting; and they are made available to the City Council.

3.3 Order of Presentation

The procedure for the conduct of meetings is generally as follows:

(a) The Chairperson opens the meeting and announces the first and subsequent items.
(b) City staff presents its report, including any recommendation.
(c) Questions of staff by members of the Water Commission.
(d) Oral presentations by members of the public, per Section 3.4.
(e) Water Commission deliberates on the issue and can ask staff any questions for clarification.
(f) The Water Commission deliberates and takes action.
3.4 Oral Presentation - Time Limits, and Number of Speakers

(a) Prior to the meeting, or during the meeting prior to a matter being reached, persons wishing to address the Water Commission should fill out a speaker card and submit it to the City Water Staff. Those desiring not to provide their name should see Ventura Water staff for further instructions on how this can be accommodated.

(b) Any person desiring to address the Commission must first be recognized by the Chairperson. All comments should be made clearly and audibly and all speakers should first state their full names and City of residence and the names of any persons in whose behalf they are appearing.

(c) In order to conduct orderly and timely meetings, oral presentations by the public may not exceed a cumulative total of five (5) minutes for a single meeting. Members of the public making oral presentations to the Commission in connection with one or more agenda items at a single meeting are limited to three (3) minutes on any agenda item with a cumulative total of five (5) minutes for all agenda items at such meeting unless otherwise provided. If the Chairperson deems it appropriate, in extraordinary circumstances he or she may extend the time limit for any speaker. The Chairperson may also limit the time provided to speakers in order to ensure an orderly and timely meeting. Except when necessary for immediate clarification of a particular point, no person shall be allowed to speak a second time until all others wishing to be allowed to speak have had an opportunity to do so, and then only at the discretion of the Chairperson.

(d) In order to expedite matters and to avoid repetitious presentations, the designation of a spokesperson is encouraged.
Whenever any group of persons, all of whom are present, wishes to address the Commission on the same subject matter, the group is encouraged to designate a spokesperson to address the Commission. Each member of the group shall complete a speaker card in advance of the matter being called and shall note on the card the person whom they wish to have speak on their behalf. By allowing another person to speak on their behalf, each group member shall relinquish their right to speak on the matter. With the consent of a majority of the Commissioners present, the Chairperson may then extend the time allocation for the designated spokesperson from three (3) minutes up to a maximum of ten (10) minutes depending upon how many cards have been submitted.

(e) Persons who anticipate oral presentations exceeding five (5) minutes are encouraged to submit comments in writing, in advance of the meeting, care of the General Manager, for prior distribution to the Commission.

(f) Comment cards may be used by members of the public who do not wish to or cannot verbally address the Commission during a meeting. A person may indicate their comments and their opposition or support for an agenda item on a comment card prior to or during the Commission's consideration of the item.

During the public testimony of the item, the Chairperson will indicate that the Commission has received comment cards from (name of person) in support of the project or issue and comment cards from the (name of person) in opposition of the project or issue. The minutes will reflect the Commission's receipt of comment cards in opposition and support of a proposed project or other subject.

(g) Any person addressing the Commission may present a PowerPoint software or other visual media presentation to the Commission utilizing the City's audio/visual equipment.
i. All PowerPoint presentations must comply with the applicable time limits for oral presentations and cumulative time limits. Presentations should be planned with flexibility to adjust to any changes in these time limits.

ii. Each slide of the PowerPoint presentation must identify that this is the "Personal Comments of Private Citizen [first and last name]."

iii. All PowerPoint presentations must be submitted on suitable media already formatted in PowerPoint format and be submitted to the General Manager no later than noon the day before of the Water Commission meeting to allow for virus checks and compatibility with City equipment.

iv. Any discs, flash drives, or other media submitted that are thought to contain viruses or unable to be scanned for viruses by City equipment will not be permitted to be used.

v. If compatibility or viruses are at issue, a member of the public may provide ten (10) printed hard copies of the PowerPoint presentation during their presentation.

(h) Any of the time limits in this section may be reduced at the discretion of the Chairperson, or a majority of the Commission present, if determined necessary or desirable for the efficient and orderly conduct of the meeting.

3.5 Written Materials

Members of the public who may not be able to attend a meeting may submit letters or written comments. The written information from members of the public not at the meeting shall be presented to the Water Commission before the meeting and if received prior to the
day of the meeting will be sent to the Commissioners via email if possible.

Members of the public who wish to submit written information at the meeting should provide twenty (20) copies of the information in order to assure it is considered by the Commission.

Water Commission adopted the following policy regarding written submissions to ensure that it has reasonable and appropriate opportunity to review materials.

3.5.1 Copying and Distribution

The submitting party must provide twenty (20) copies to the Water Commission Secretary; the Commission Secretary will not make copies. The Commission Secretary will distribute all complying submissions, as defined below. Non-complying submissions will be stamped, filed, and not distributed.

3.5.2 Regular Submissions

All materials delivered in advance of the staff report becoming publicly available, must be submitted ten (10) days prior to the Water Commission meeting. Twenty (20) copies of the materials must be delivered or mailed to the Commission Secretary at City of Ventura Maintenance Yard, 336 Sanjon Road, Ventura, CA 93002. The Commission Secretary will send these submissions to the Water Commission together with the staff reports.

3.5.3 Responding Submissions

All materials delivered in response to either the staff report or responding submissions must be submitted no later than thirty (30) hours before the Commission meeting. Submissions, including exhibits, may not exceed ten (10) pages and twenty (20) copies must be sent to the Commission Secretary at City of Ventura Maintenance Yard, 336 Sanjon Road, Ventura, CA 93002. The Commission Secretary will deliver these submissions to the City Water Commission within 24 hours of
receipt. Electronic submissions may be sent to venturawatercommission@venturawater.net.

The City will under no circumstances make copies of any document longer than ten (10) pages in length, but may do so in its sole discretion if it is feasible given the time and cost of doing so.

3.5.4 Day of Meeting Submissions

Day of meeting submissions may not be more than two (2) written pages, including exhibits. Twenty copies of the submission must be given to the Commission Secretary who will distribute them to the Water Commission when the agenda item is called. A reasonable number of photographs, posters, and short [(five (5) minutes maximum)] presentations will be accepted no later than 5:00 p.m. on the day of hearing. The City will under no circumstances make copies of any document longer than two (2) pages in length, but may do so in its sole discretion if it is feasible given the time and cost of doing so.

3.5.5 Non-complying Submissions

Submissions, which do not fall within the above prescriptions, will be entered into the record and not delivered to the Water Commission. These submissions will be stamped "File Copy. Non-Complying Submission", and placed into the official case file. The Water Commission will be under no obligation to consider the information contained in any non-complying submission.

3.5.6 Written Errata Memo

An Errata Memo is a change to the staff report that describes the change to the Commissioners. This errata memo will be provided to the Commissioners on the dais prior to the start of the meeting.

3.6 Questioning of Speakers
Any person other than a Commissioner desiring to direct a question to a speaker or staff member shall submit the question to the Chairperson, who shall determine whether the question is relevant to the subject at hand and whether or not it should be answered by the speaker or staff member. Direct questioning of speakers or staff members may be allowed in extraordinary circumstances, only at the discretion of the Chairperson.

3.7 Changes to Agenda Order

The Water Commission Chairperson shall, prior to consideration of the meeting agenda, poll Commissioners on the movement of agenda items for consideration. The movement or order of agenda items may be changed upon the majority approval of the Commission.

4. MOTIONS

4.1 Motions - Second

Any member may propose action upon an agenda item – including an order, resolution, ordinance, or any other action of the City Water Commission by a motion. Before a motion can be considered or debated it must be seconded, at which time it shall be on the floor and must be considered. If not seconded, the motion is lost for lack of a second and shall be so declared by the Chairperson.

4.2 Amendment of Motion or Substitute Motion

A motion on the floor may be amended at any time before adoption or rejection. When an amendment is offered, the Water Commission will debate and take action on the amendment before acting on the original motion. If the amendment is not adopted, the original motion will then be considered. If the amendment is adopted, the original motion as amended will then be considered.

4.3 Withdrawal of Motion or Second

A motion may be withdrawn by the maker at any time before adoption or rejection, with consent of the second. A second to a motion may
be withdrawn by the seconding member at any time before adoption or rejection of the motion. The motion will then be lost for lack of a second and so declared by the Chairperson unless seconded by another Commissioner.

4.4 Reserved

4.5 Discussion, Closure, and Question

After a motion has been seconded, any member may discuss or comment on the subject of the motion. The Chairperson will recognize members of the Water Commission with the desire to speak, beginning with the motion's maker, and will protect each speaker from disturbance or interference. When no member wishes to discuss or comment further, the Chairperson shall call for a vote on the motion. Any member of the Water Commission may at any time move to close the debate.

4.6 Motions for Reconsideration

Any member who was present and voted with the prevailing majority on a matter to be reconsidered may make motions for reconsideration of a matter. Any member of the Water Commission may second a motion to reconsider. Motions to reconsider shall be made at the same meeting as the original motion or at the next succeeding meeting. A reconsideration motion at the next succeeding meeting shall be agendized for discussion and action at the next meeting, consistent with the Brown Act.

5. DECISION-MAKING

5.1 Voting

Approval of any motion brought before the City Water Commission shall require the affirmative vote of a majority of the members present and voting, unless otherwise specified by law.

5.1.1 Tie Votes
Any tie vote shall constitute a denial of the motion and may be reconsidered by a motion offered by any member who voted on the matter. If there is no action by an affirmative majority vote, the result is no action.

5.1.2 Abstentions

Abstentions shall not count as votes for the purpose of determining whether there has been an affirmative vote of a majority of the members present, but shall be counted for the purpose of determining whether a quorum is present, unless the member is abstaining because of a potential conflict of interest in the matter at hand.

5.1.3 Roll Call

Voting upon a motion may be by roll call or electronic means.

5.1.4 Motions Include Staff Recommendations

A motion to adopt or approve staff recommendations or simply to approve the action under consideration shall, unless otherwise particularly specified, be deemed to include adopting of all related actions recommended in the staff report on file on the matter.

5.1.5 Absentees

A City Water Commission member who is absent from any portion of a public meeting may vote on the matter at the time it is acted upon, provided that he or she has listened to a recording of the entire portion of the meeting from which he or she was absent, if such a tape recording exists, and if he or she has examined all of the exhibits presented during the portion of the meeting from which he or she was absent and states for the record before voting that the member deems himself or herself to be familiar with the record and with the information presented at the meeting as he or she would have been had he or she personally attended the entire meeting.
5.1.6 Alternates

Alternates shall only vote when one or more members in their respective category (Professional or Demonstrated Special Interest) is absent. In addition, alternates shall only vote if they believe they have acquired and understand the information that has been provided to the Water Commission for any relevant water matter. Alternates shall endeavor to attend all meetings, even if they are not planning to vote in the absence of a regular Commissioner. Alternates are not permitted to be included in the Commission discussion of agenda items at a meeting unless they will be voting at that meeting. Alternates are permitted to speak during public comment and submit questions for the Chairperson to consider.

Alternates are expected to follow the Brown Act requirements as if they were sitting commissioners. Alternates are not permitted to discuss agenda items with a majority of other members of the Water Commission outside of a noticed public meeting and shall base their vote when sitting as a voting member of the Commission on their own opinion or belief.

5.2 Continuances

Upon a showing of good cause and by request of staff, member of the public, or member of the City Water Commission, the Chairperson, at the time set for a meeting on a particular item, may, with the concurrence of a majority of the commissioners present, order the agenda item to be continued to a specified date and time. Upon the request of any member of the City Water Commission, continuance decisions shall be made by roll call vote of all members present.

6. CONSTRUCTION AND EFFECT

6.1 Construction

These procedural rules shall be construed and applied so as to ensure public input and to facilitate an orderly analysis of water matters by the City Water Commission.
6.2 Chairperson’s Rule of Order

When there is no provision of these rules of procedure applicable to the conduct of the meeting of the Water Commission, or to a particular question of conduct or order that may arise in the course of such meeting, the Chairperson shall suggest appropriate rules for consideration by the entire Commission. The Commission will, in turn, based upon a majority vote of those members present, adopt an ad hoc rule for any questions of conduct or point of order that may arise. In the event of a tie vote on any such ad hoc rule, the Chairperson’s decision on the proposed ad hoc rule shall be final.

6.3 Conflicts of Interest

Water Commissioners that have a conflict of interest with any particular agenda item shall be required to abstain from discussion and vote. Said Commissioner shall inform the Commission prior to discussion of any item on which the Commissioner has a conflict of interest and have the reason noted in the record.

7. SECRETARY OF THE COMMISSION

7.1 Ventura Water General Manager Shall Serve as Secretary

Pursuant to San Buenaventura Municipal Code Section 2.460.010, the Ventura Water General Manager shall serve as the Commission Secretary and custodian of its records. The Secretary shall have no vote.
Document comparison by Workshare 9 on Tuesday, May 21, 2019 9:08:09 PM

**Input:**

<table>
<thead>
<tr>
<th>Document 1 ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>file://F:\RESOLUTIONS\VENTURA WATER\2019\Water Commission Rules Update\WC 2018 Updated Rules.v1.docx</td>
<td>WC 2018 Updated Rules.v1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Document 2 ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F:\RESOLUTIONS\VENTURA WATER\2019\Water Commission Rules Update\WC 2019 Updated Rules.v1.docx</td>
<td>F:\RESOLUTIONS\VENTURA WATER\2019\Water Commission Rules Update\WC 2019 Updated Rules.v1.docx</td>
</tr>
</tbody>
</table>

**Rendering set** Standard

**Legend:**

- **Insertion**
- **Deletion**
- **Moved from**
- **Moved to**
- **Style change**
- **Format change**
- **Moved deletion**
- **Inserted cell**
- **Deleted cell**
- **Moved cell**
- **Split/Merged cell**
- **Padding cell**

**Statistics:**

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertions</td>
<td>3</td>
</tr>
<tr>
<td>Deletions</td>
<td>2</td>
</tr>
<tr>
<td>Moved from</td>
<td>0</td>
</tr>
<tr>
<td>Moved to</td>
<td>0</td>
</tr>
<tr>
<td>Style change</td>
<td>0</td>
</tr>
<tr>
<td>Format changed</td>
<td>0</td>
</tr>
<tr>
<td>Total changes</td>
<td>5</td>
</tr>
</tbody>
</table>
RESOLUTION NO. 2019-001

A RESOLUTION OF THE WATER COMMISSION OF THE CITY OF SAN BUENAVENTURA, CALIFORNIA, AMENDING RULES OF PROCEDURE

WHEREAS, at the Regular Meeting on August 25, 2015, the Water Commission approved Resolution No. 2015-001, adopting Rules of Procedure for the Conduct of Business on Water Matters Before the Water Commission of the City of San Buenaventura (“Rules of Procedure”); and,

WHEREAS, at the Regular Meeting on August 28, 2018, the Water Commission approved Resolution No. 2018-001, amending the Rules of Procedure; and,

WHEREAS, the Water Commission desires to amend the Rules of Procedure.

NOW, THEREFORE, the Water Commission of the City of San Buenaventura does hereby resolve, find, determine and order as follows:

Section 1: San Buenaventura Municipal Code Section 2.410.120J and Chapter 2.460 establishes the City Water Commission and prescribes the administration of, qualifications for service, and duties of its members.


Section 3: The attached text shall constitute the City of San Buenaventura Water Commission Rules of Procedure insofar as they are consistent with applicable state laws and City ordinances governing the conduct of all business.
PASSED AND ADOPTED this 28th day of May, 2019.

Susan Rungren, Secretary

APPROVED AS TO FORM
GREGORY G. DIAZ, City Attorney

BY: Miles P. Hogan
Assistant City Attorney II

5/21/19
Date

Commissioners voting:

Yes: ______________________

No: ______________________

Abstain: __________________

Absent: __________________
I, Susan Rungren, Secretary of the Water Commission of the City of San Buenaventura, do hereby certify that the above and foregoing Resolution No. 2019-001 was duly passed and adopted by the Water Commission of said City at a regular meeting thereof, held on the 28th day of May, 2019, by the following vote, to wit:

WATER COMMISSION ACTION:

AYES:

NOES:

ABSTAIN:

ABSENT:

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of May, 2019.

Secretary, Water Commission
City of San Buenaventura,
California
To: Ventura Water Commission

From: Susan Rungren, Interim Ventura Water General Manager

Subject: Groundwater Sustainability Agencies and Santa Paula Basin Technical Advisory Committee Update

RECOMMENDATIONS

Staff recommends the Water Commission receive an oral update on the status of local Groundwater Sustainability Agencies and the Santa Paula Basin Technical Advisory Committee.

PREVIOUS MEETINGS

October 24, 2017 - the Water Commission received an update on the Groundwater Sustainability Agencies and the Santa Paula Basin Technical Advisory Committee.

February 27, 2018 – the Water Commission received an update on the Groundwater Sustainability Agencies and the Santa Paula Basin Technical Advisory Committee.

August 28, 2018 - the Water Commission received an update on the Groundwater Sustainability Agencies and the Santa Paula Basin Technical Advisory Committee.

October 30, 2018 - the Water Commission received an update on the Groundwater Sustainability Agencies and the Santa Paula Basin Technical Advisory Committee.

DISCUSSION

In 2014, the State legislature passed the Sustainable Groundwater Management Act (SGMA) to improve management of groundwater basins and give local agencies a chance to manage the basins as Groundwater Sustainability Agencies (GSAs). The legislation is critical in bridging land use and groundwater management through coordination of General Plans and Groundwater Sustainability Plans (GSPs).

The City participated in the formation of the Upper Ventura River Groundwater Basin GSA and the Mound Basin GSA and is a member of both GSAs. The City participates in the development of the GSP for the Oxnard Plain Basin, but Fox Canyon Groundwater Management Agency (FCGMA) is named in the legislation as the GSA. The City also
extracts groundwater from the Santa Paula Basin, but it is considered adjudicated for the purposes of this legislation.

**Upper Ventura River Basin**

On December 12, 2016, Casitas Municipal Water District, Ventura River Water District, Meiners Oaks Water District, City of San Buenaventura (City), and the County of Ventura executed a Joint Powers Agreement (JPA) forming the Upper Ventura River Groundwater Agency (UVRGA). The Board of Directors is composed of five Member Directors and two Stakeholder Directors which includes an Agricultural Director and an Environmental Director. The Member Directors are chosen by the respective governing bodies of each local agency that is a member of the JPA. Each Member Director also has an alternate. The Ventura Water General Manager is the designated Director and the Assistant General Manager is the designated alternate for the City.

The UVRGA has until January 31, 2022 to submit its Groundwater Sustainability Plan (GSP) to DWR. The UVRGA submitted its initial notification to develop a GSP to DWR on December 20, 2017. At its April 11, 2019 meeting, the Board approved a Master Services Agreement with Intera, Inc. for as needed GSP development support services. Additional information on meeting agendas and progress towards GSP development can be found on the UVRGA website at https://uvrgroundwater.org/.

The UVRGA is currently funded by member contributions and has an approved budget of $425,000 for Fiscal Year 2018-2019. The City contributed $50,000 for Fiscal Year 2018-2019. UVRGA was awarded approximately $630,000 through DWR’s Sustainable Groundwater Planning Grant Program to complete a GSP by January 2022. At its February 4, 2019 meeting, the Board authorized the Board Chair to execute a grant agreement with DWR for the 2017 Prop 1 Sustainable Groundwater Planning Grant for an award of up to $630,061. The cost share requirement for UVRGA will be $221,373.

The UVRGA approved a multi-year budget for Fiscal Years 2019-20 through 2023-24 at its April 11, 2019 meeting. At the meeting the Board requested that the three largest pumpers (City of Ventura, Ventura River Water District, and Meiners Oak Water District) consider providing a total of $90,000 in loaned contributions for Fiscal Year 2019-20 in order to keep the estimated annual extraction fees reasonable. Contributions would be repaid in Fiscal Year 2022-23 with no interest. City of Ventura, Ventura River Water District, and Meiners Oak Water District subsequently approved providing the loans and the Board scheduled a public hearing for June 13, 2019 to consider adoption of extraction fees. The proposed fee is $79.16 per acre foot. This fee is expected to decrease over the next five years as the GSP is developed. The City’s annual extraction fee payment will be based on its past five-year average pumping of 2,384 AFY.

**Mound Groundwater Basin**

On June 14, 2017, the City, the County of Ventura, and United Water Conservation District (UWCD) executed a Joint Powers Agreement (JPA) forming the Mound Basin Groundwater Sustainability Agency (MBGSA). The Board of Directors is composed of three Member Directors and two Stakeholder Directors which includes an Agricultural Director and an Environmental Director. The Member Directors are chosen by the respective governing
bodies of each local agency that is a member of the JPA. The Ventura Water General Manager is the designated Director for the City of Ventura.

The Board adopted a budget of approximately $368,000 for Fiscal Year 2018-2019 at its June 21, 2018 meeting. This includes member contributions of $55,000 from the City of Ventura and $50,000 from the County of Ventura, in-kind services provided by United Water Conservation District (UWCD) valued at $50,000, revenue generated from a groundwater extraction fee, and grant reimbursement funds from DWR. The Board adopted a groundwater extraction fee of $40 per acre foot on August 23, 2018. The Mound Basin GSA shall repay the City and County by December 31, 2022, plus accrued interest at the annual rate published as the yield of the Local Agency Investment Fund administered by the California State Treasurer.

MBGSA was awarded grant funding through DWR’s Sustainable Groundwater Planning Grant Program to complete a GSP by January 2022. At its October 18, 2018 meeting, the Board authorized the Board Chair to execute a grant agreement with DWR for the 2017 Prop 1 SGWP Grant for an award of up to $583,100. The cost share requirement will be $204,873.

The Basin Boundary modification for the Mound Basin was approved by DWR on February 11, 2019. DWR’s draft basin prioritization phase II designates the Mound Basin as a high priority basin.

The MBGSA has until January 31, 2022 to submit its Groundwater Sustainability Plan (GSP) to DWR. The MBGSA submitted its initial notification to develop a GSP to DWR on September 17, 2018. At its March 21, 2019 meeting, the Board authorized the Chair to execute a professional services agreement with Intera, Inc. for GSP as-needed support services. Additional information on meeting agendas and progress towards GSP development can be found on the MBGSA website at https://www.moundbasingsa.org/.

**Oxnard Plain Groundwater Basin**

The Fox Canyon Groundwater Management Agency (FCGMA) was named in SGMA as the GSA for the Oxnard Plain and Pleasant Valley Groundwater Basins. The City participates in various FCGMA committees in the development of a GSP for the Oxnard Plain and Pleasant Valley Basins. Over the past two and a half years, the Ventura Water General Manager has participated on the Municipal and Industrial (M&I) stakeholder group. The stakeholder group is comprised of the City of San Buenaventura, City of Camarillo, City of Oxnard, City of Port Hueneme, Channel Islands Beach Community Services District, Port Hueneme Naval Base, and Camrosa Water District. The primary focus of GSP negotiations has been on the split of the total allocations between agricultural pumping compared to M&I.

The FCGMA Board released the Preliminary Draft GSPs for the Oxnard, Pleasant Valley, and Las Posas Valley Basins for a 90-day public comment period on January 3, 2018. The Preliminary Draft GSP for the Oxnard Plain Basin did not include several sections that would be required to have a complete draft GSP that meets SGMA requirements. The Agency received 28 comment letters on the Preliminary Draft GSPs by the close of the public comment period. The comment letters are posted on the Agency website.
www.fcgma.org. The consultant preparing the GSP summarized the comments and presented common themes and decision points to the FCGMA Board in May and June 2018. The current schedule is for the revised draft GSPs to be ready for a 60-day public comment period on July 24, 2019, and for the final GSPs to be ready for Board adoption at the December 13, 2019, special meeting.

FCGMA staff has been working with stakeholders since October 2015 to develop a new pumping allocation system be developed for the Oxnard and Pleasant Valley (OPV) Basins consistent with SGMA. The intent was to implement a new allocation system by October 1, 2018. In June 2018, the Board directed that the Emergency Ordinance E allocation system continue through 2018 with the goal of transitioning to a new fixed allocation system on January 1, 2019. The FCGMA Board conducted a public hearing and first reading of the proposed new allocation ordinance at its November 20, 2018, meeting. The Board directed staff to revise the proposed ordinance to include Conejo Creek Project Water in the allocation for Pleasant Valley County Water District (PVCWD). Following a public hearing and discussion of a revised version of the proposed ordinance at the January 23, 2019 meeting, the Board directed that Conejo Creek Project Water be removed from the ordinance, that PVCWD’s initial extraction allocation be modified, and several other modifications. The Board considered a further revised version of the proposed ordinance at the February 27, 2019, meeting and directed Agency staff to continue working to address outstanding issues. Staff provided an update on the ordinance revisions at the May 22, 2019 Board meeting and requested Board direction on the proposed revisions and remaining outstanding issues including: PVCWD extraction allocation, emergency situations, revised allocation terminology, allocation carryover among commonly owned facilities, Oxnard-Hueneme (O-H) pipeline language, and carryover of unused Santa Clara River water flex allocation. Staff plans to complete the revised draft ordinance for potential adoption at the June 26, 2019, Board meeting. Staff has recommended an effective date for this ordinance of October 1, 2019.

Santa Paula Basin
In March 1996, the Superior Court of the State of California for the County of Ventura entered a stipulated judgment to establish pumping allocations and a management plan for the Santa Paula Groundwater Basin (United Water Conservation District vs. City of San Buenaventura, original March 7, 1996, amended August 24, 2010 [hereinafter “Judgment”]). The Judgment provides for the creation of a Santa Paula Basin Technical Advisory Committee (TAC) with equal representation from UWCD, the Santa Paula Basin Pumpers Association (SPBPA), and the City of San Buenaventura. The TAC is charged with establishing a program to “monitor conditions in the basin, including but not necessarily limited to verification of future pumping amounts, measurements of groundwater levels, estimates of inflow to and outflow from the basin, increases and decreases in groundwater storage, and analyses of groundwater quality.” The Judgment also allows for the development of a management plan for the operation of the basin and empowers the TAC to determine the safe yield of the basin.

The Judgment requires annual reports to be prepared summarizing results of the monitoring program. The latest annual report (The 2017 Santa Paula Basin Annual Report) was completed and submitted to the Court on April 29, 2019.
In addition to the TAC, a Santa Paula Basin TAC Working Group was established in 2010 consisting of technical experts from United, the SPBPA, and the City. Since its formation, the Working Group has completed a series of specialty studies to better understand the factors that affect safe yield in the Basin. The Working Group is currently evaluating metrics ("triggers") that will be used to evaluate whether and to what extent the basin might be negatively affected by future pumping and considering options to enhance safe yield of the basin. A draft study entitled, “Groundwater Elevation Triggers for the Santa Paula Basin” has been prepared. The next Working Group meeting is scheduled for June 2019 to discuss comments on this draft study.

The primary groundwater management objective in the Santa Paula Basin is to ensure that production from the basin does not exceed the long-term sustainable yield of the suitable-quality groundwater for current and anticipated future uses. The TAC’s specialty studies and annual monitoring reports provide data and analysis intended to support this objective.

Prepared by Jennifer Tribo, Management Analyst II for:

[Signature]
Susan Rungren
Interim Ventura Water General Manager
To: Ventura Water Commission

From: Susan Rungren, Interim Ventura Water General Manager

Subject: Final Draft 2019 Comprehensive Water Resources Report

RECOMMENDATIONS

It is recommended that the Water Commission receive this written report and an oral presentation on the Final Draft 2019 Comprehensive Water Resources Report and recommend approval to the City Council.

PREVIOUS ACTIONS

June 3, 2013, the City Council approved the 2013 Comprehensive Water Resources Report (CWRR). 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.

May 5, 2014, the City Council approved the 2014 CWRR. At this time, staff advised the City Council that the demand factors would be re-evaluated every ten years as a coordinated effort to have consistent factors that development could incorporate.

May 18, 2015, the City Council approved the 2015 CWRR.

March 22, 2016, the Water Commission received the Draft 2016 CWRR. The Draft 2016 CWRR included updated supply numbers incorporating the 20 percent water supply buffer and included new water supplies from Direct Potable Reuse and Saticoy Well 3.

April 26, 2016, the Draft 2016 CWRR was provided to the Water Commission for acceptance by City Council.

June 13, 2016, the City Council approved the 2016 CWRR.

March 28, 2017, the Water Commission received the Draft 2017 CWRR and recommended approval to the City Council. The Draft 2017 CWRR included a revised baseline demand utilizing a 10-year average and updated normal (non-drought year)
supply numbers for the Casitas Municipal Water District (Casitas) and the Santa Paula Basin sources.

April 24, 2017, the City Council received the 2017 CWRR.

March 27, 2018, the Water Commission received the framework for the 2018 CWRR. The Water Commission recommended utilizing consistent historical averages for the various water supplies and incorporating the State Water Project emergency/backup supply into the Projected Supply table in the Draft 2018 CWRR.

April 24, 2018, the Water Commission received the Draft 2018 CWRR.

May 22, 2018, the Water Commission received the Final Draft 2018 CWRR and recommended approval to the City Council.

June 4, 2018, the City Council received the Final 2018 CWRR and confirmed that the City should remain in a Stage 3 Water Shortage Event.

March 26, 2019, the Water Commission received the Draft 2019 Comprehensive Water Resources Report.

April 23, 2019, the Water Commission received the Redlined Draft 2019 Comprehensive Water Resources Report.

**DISCUSSION**

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. Our 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. The City 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. The City Council subsequently approved the 2014 CWRR in May 2014, the 2015 CWRR in May 2015, the 2016 CWRR in June 2016, and received the 2017 CWRR in April 2017 and 2018 CWRR in June 2018.

The Draft 2019 CWRR was presented during the March 26, 2019 Water Commission meeting. During this meeting, Water Commission provided staff direction on the organization of Table 2-4 - Summary of Approved and Under Construction Projects and selected an updated methodology for the water loss factor. In addition, staff received verbal comments requesting clarification on Casitas Municipal Water District’s Stage Conditions and “Normal” supply. Specifically, what defines a “Normal” year and how can 2025 and 2030 be considered “Normal” years given the status of the on-going water shortage and uncertainties from climate change and potential environmental,
regulatory, and legal constraints. One public comment was received on March 26, 2019 and written comments were received from the Water Commission from April 3, 2019 to April 8, 2019 on the Draft 2019 CWRR.

Staff summarized and responded to the comments in a Comment Matrix. In addition, the comments and feedback were incorporated, as feasible, into the Redlined Draft 2019 CWRR. The Comment Matrix and Redlined Draft 2019 CWRR were presented at the April 23, 2019 Water Commission meeting. Changes incorporated into the Redlined Draft 2019 CWRR included, but are not limited to, added definitions of “drought” and “water shortage”, additional language on the State Water Project, and revamped Section 6 with a more robust discussion on future supplies and new tables.

During the April 23, 2019 Water Commission meeting, Water Commission direction was requested on the following:

- **Baseline Demand Condition**: The previous 2013 to 2016 CWRRs utilized the most recent 5-year average as the baseline demand condition. However, previous City Council and Water Commission direction was to use the 10-year average, which was incorporated in the 2017 and 2018 CWRRs. Commissioner Scott McCarty proposed using the 5-year average. The Water Commission voted to continue using the 10-year average for the 2019 CWRR.

- **Table 4-3 – Summary of Projected Future Water Supply from Existing and Potential New Sources**: In the 2018 CWRR, Table 4-3 depicted existing and future supplies. Per Water Commission request, staff included an additional column in Table 4-3 to include normal supply (from Table 4-1). This year, Staff received a Water Commission comment to remove the normal supply column. The Water Commission voted to keep Table 4-3 as is, with the normal supply column.

- **Table 6-3 – Ventura Water Supply Sources – Possibilities, Challenges, and Uncertainties**: As discussed above, verbal comments were received on the 2025 and 2030 Normal Supply. Commissioner Martin Feeney provided a water supply matrix which incorporated supply estimates, uncertainties, challenges, and opportunities for each supply source. Staff revised this matrix and presented Table 6-3 (formerly Table 6-2) at the meeting. The Water Commission voted to incorporate the table into the report with the following suggested revisions:
  - Revise potential opportunities to increase supply for recycled water
  - Categorize water supplies as groundwater and other
  - Add percentages to water supplies

- **Table 6-4 – Potential Future Water Supply Scenarios**: Staff presented a new Table 6-4 (formerly Table 6-3) which shows alternative supply scenarios for the
years 2024, 2025, and 2030 compared to the 2024, 2025, and 2030 Normal Supply. This new table was added to the report to evaluate future supply under various scenarios including a multi-year drought or emergency situation. The Water Commission voted to include Table 6-3, along with a visual representation of this table, new Figure 6-2, in the report. With the addition of Figure 6-2, Staff modified Figure 6-1 to reflect near-term supply and demand projections.

During discussion of the above items, the Water Commission also directed staff to include a glossary defining terms such as “Normal” in Section 1F. Additionally, the Water Commission voted to amend a sentence in Section 4 of the report in the Ventura Water Pure section. Staff has incorporated all of the above changes into the Final Draft 2019 CWRR dated May 20, 2019. The Executive Summary has also been added to the Final Draft 2019 CWRR. Staff also made a few adjustments to Table 6-1 to highlight the supply and demand comparison for the near-term (Years 2019-2024) and identify projected supply ranges for Years 2025-2030.

The CWRR includes an analysis of the water shortage stages triggers established in the 2015 Water Shortage Event Contingency Plan (WSECP). The City has remained in a Stage 3 Water Shortage Event since City Council first declared a Stage 3 Water Shortage Event in 2014. The WSECP specifies that the water shortage stage trigger is calculated by comparing the Annual Supply Projection to the Normal Year Supply Projection. The WSECP also states that the Normal Year Supply Projection will not change for the duration of the shortage event. The annual supply projection from Table 4-2 in the draft 2019 CWRR is 15,651 AFY. The normal year supply projection from Table 4-1 of the 2013 CWRR is 19,600 AFY. Therefore, the annual supply projection is 20.15% below normal year supply and the City remains in a Stage 3 Water Shortage Event.

Staff will incorporate changes, as appropriate, to the Final Draft based on comments received during the May 28, 2019 Water Commission meeting. The Final 2019 CWRR will be presented to the City Council on June 10, 2019.

Prepared by Jenny Tribo, Management Analyst II for:

Susan Rungren
Ventura Water Interim General Manager

Attachments:

A. Final Redline Draft 2019 CWRR dated May 20, 2019
B. Final Clean Draft 2019 CWRR dated May 20, 2019
2019 COMPREHENSIVE WATER RESOURCES REPORT

FINAL DRAFT Report

Prepared by: Ventura Water
501 Poli Street
Ventura, CA 93002

Staff:  Betsy Cooper, P.E.
       Susan Rungren, P.E.
       Nikhil Dhir
       Jennifer Tribo
       Monica Noeng

MAY 20, 2019
EXECUTIVE SUMMARY

Background and Purpose
In 2010 Public Works conducted a workshop with City Council that included information on the City’s water supply issues. It was presented that with continued years of drought, tightening water restrictions and environmental responsibilities, Ventura’s water supply was being impacted by several factors. A recommendation from the workshop was to provide a comprehensive evaluation of current and projected water supply needs. In June 2013, the first Comprehensive Water Resources Report (CWRR) was developed as a result. The CWRR is intended to be a tool in the development review process as it pertains to water supply and demand. The CWRR tracks proposed development projects, consistently calculates the anticipated increase in water demand associated with each proposed development project, and then evaluates the impact on the current water supply.

Previous Council Action
On June 10, 2013 the City Council approved the first 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.
On May 18, 2015 the City Council approved the 2015 Comprehensive Water Resources Report.
On June 13, 2016, the City Council approved the 2016 Comprehensive Water Resources Report.
On April 24, 2017, the City Council received the 2017 Comprehensive Water Resources Report.
On June 4, 2018, the City Council received the 2018 Comprehensive Water Resources Report.

2019 CWRR Updates
Major updates to the 2019 CWRR include a revised methodology for determining the water loss factor, revised methodology for calculating future demand projections, additional language in the Water Supply and Programs and Policies (Sections 4 and 5) clarifying Casitas Municipal Water District (CMWD) Stage conditions and water shortage events, and a revamped Conclusions and Discussion (Section 6). Per Water Commission request, a glossary has been added to Section 1F to define terms including “Drought” and “Normal”, and new Tables 6-3 and 6-4 and Figure 6-2 have been added to address future uncertainties in water supply and possible scenarios where future supplies are not “Normal”. Further updates are summarized below.
A summary of the most current and best information available on our water supply and demand is shown in Table ES-1 below.

**Table ES-1**

<table>
<thead>
<tr>
<th></th>
<th>Projected</th>
<th>2019 Drought (AFY)</th>
<th>2020 Drought (AFY)</th>
<th>2021 Drought (AFY)</th>
<th>2025 (AFY)</th>
<th>2030 (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>15,651</td>
<td>17,020</td>
<td>16,541</td>
<td>23,954 - 27,007</td>
<td>24,282 - 28,535</td>
<td></td>
</tr>
<tr>
<td>Demand*</td>
<td>16,304</td>
<td>16,573</td>
<td>16,842</td>
<td>17,571</td>
<td>18,055</td>
<td></td>
</tr>
<tr>
<td>Available Supply</td>
<td>(653)</td>
<td>447</td>
<td>(301)</td>
<td>6,383 – 9,436</td>
<td>6,227 – 10,480</td>
<td></td>
</tr>
</tbody>
</table>

*Demand equals baseline 10 year average (16,035 AF) plus the estimated demand from the approved projects list for future years fully vested in 2023 and using an approximate 0.54% growth rate to 2030 (Table 3-8 & 6-1). Assumes a new supply source (VenturaWaterPure) starting in 2025.

As shown in Table ES-1, the projected 2019 and 2021 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 conserve and comply with the Stage 3 water shortage event conservation measures. In addition to continued conservation, the City may be required to use water in excess of the anticipated amounts from the City’s water supply sources which could result in the payment of penalties, (i.e. extraction of groundwater from the Oxnard Plain Groundwater Basin in excess of the City’s extraction allocation). The City has always worked to address long-term water demands with effective planning and development of additional future water supplies. The City currently has two proposed water supply projects in the planning stages: VenturaWaterPure and the State Water Interconnection Project, which together would ensure that the City has adequate supplies for future demand under various climatic conditions. The 2019 CWRR includes the addition of new Tables 6-3 and 6-4 and Figure 6-2 to address future water supply in 2024, 2025, and 2030 under a normal year, multi-year drought, and emergency supply scenarios. The purpose of these additions is to illustrate that the City’s water supplies are vulnerable to many factors outside of the City’s control. Consequently, water supply projections past 2021 are highly uncertain. For a detailed discussion, please refer to Section 6 of the report.

**Baseline Demand**

Utilizing the previous 10-year (2009 to 2018) City annual average, the baseline water demand for the 2019 CWRR is 16,035 AF. The baseline water demand has been decreasing each year (with the exception of the Calendar Year 2016). In February 2014, City Council called for 10% voluntary conservation, followed by the September 2014 City declaration of a Stage 3 Water Shortage Event requiring customers to reduce their use by 20% due to the prolonged drought. In June 2015, City Council approved a four-tiered (drought) water rate structure. In June 2018, the City Council confirmed that the City remained in a Stage 3 Water Shortage Event.
The annual water consumption figures for the past 10 years are provided in subsection 3.D.

**Future Demand Projections (Year 2030)**

This report projects growth through 2030. The proposed near-term development projects that have been approved but are not yet connected to the City’s water system are used to project water demands for the next five years (2023). In order to project the estimated demand to the Year 2030, an approximate growth rate of 0.54% (per City Planning Department based on the Department of Finance historical data for population) was used to estimate the increase in demand from the time all approved projects are projected to be completed (Year 2023) to the Year 2030.

**Normal Water Supply**

The City’s normal (non-drought) water supply is summarized in Table 4-1. The City’s normal supplies include Casitas Municipal Water District (Casitas), Ventura River/Foster Park, Mound Groundwater Basin, Oxnard Plain Groundwater Basin, Santa Paula Groundwater Basin, and Recycled Water.

- **Casitas**: In May 2017, the City Council approved the new Water Services Agreement between the City and Casitas. Based on the new agreement, the five year average normal (non-drought) water supply from Casitas is estimated to be 5,062 AFY. To calculate the normal water supply from Casitas, the demand from the proposed development projects that are anticipated to be utilizing water by Fiscal Year 2019 are added to the five year average normal (non-drought) water supply from Casitas of 5,062 AFY (past five non-drought fiscal years FY 09-10 to FY 13-14). Therefore, the normal water supply from Casitas is estimated to be 5,375 AFY.

- **Ventura River/Foster Park**: The City’s historic production based on the 50-year average production from 1950-2000 was 6,015 AFY. However, current operational constraints allow a diversion efficiency of up to 70 percent (average 4,200 AFY) to be obtained under the City’s operations schedule, which can be considered reliable for planning purposes. Therefore, the City’s normal water supply from the Ventura River / Foster Park is 4,200 AFY.

- **Mound Groundwater Basin**: The City’s average annual extraction from 2000 to 2009 was approximately 4,000 AFY. Therefore, the City’s normal water supply from the Mound Basin is 4,000 AFY.

- **Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)**: The City’s historical allocation was set by the Fox Canyon Groundwater Management Agency (FCGMA) at 5,472 AFY, which was the average extraction from the Golf Course Wells for the base period 1985 to 1989. Beginning in 1992, historical extractions set by the FCGMA were reduced by five percent (5%) to 5,198 AFY, in 1995 it was
reduced to 4,925 AFY, in 2000 it was reduced to 4,651 AFY and further reduced in 2010 to the current allocation of 4,100 AFY. Therefore the City’s normal (pre FCGMA Emergency Ordinance E) water supply from the Oxnard Plain Basin is 4,100 AFY.

- **Santa Paula Groundwater Basin (Santa Paula Basin):** In March 1996, the City ended a five-year stalemate over the use of the Santa Paula Basin. Under a court stipulated judgment, the United Water Conservation District (UWCD), the Santa Paula Basin Pumpers Association (SPBPA; an association of ranchers and businesses), and the City all have an interest in the Santa Paula Basin. The City can pump on average 3,000 AFY from the Santa Paula Basin. In addition, the City has acquired 40.9 acre-feet of water rights in the Santa Paula Basin. Therefore, the City’s normal water supply from the Santa Paula Basin is 3,041 AFY.

- **Recycled Water:** The City of Ventura’s 2015 Urban Water Management Plan projected that annual recycled water demand would be 700 AFY in 2019.

The City’s normal water supply portfolio is 21,415 AFY and is summarized in Table 4-1.

**Current Water Supply**

The City’s current water supply sources under existing conditions for calendar year 2019 is summarized in Table 4-2.

- **Casitas:** The May 2017 Water Services Agreement indicates that, in the event that Casitas must enact its Water Efficiency and Allocation Program (WEAP) due to a water shortage, Casitas may adjust the City’s allocation consistent with the percentage reduction for the WEAP stage. As of April 2019, Casitas is currently in a Stage 3 water supply condition per Casitas Resolution No. 16-09. In order to be conservative, the 2019 CWRR assumes that Casitas will remain in a Stage 3 Condition, and imposes a reduction of 30% to the City’s Casitas supply consistent with the Stage 3 mandates. Therefore, the City’s current water supply from Casitas is 3,763 AFY for calendar year 2019.

- **Ventura River/Foster Park:** Due to the continued drought conditions and heightened environmental requirements, the City’s ability to draw water from the Ventura River continues to be significantly challenged and impacted. To determine the City’s current water supply with the existing drought conditions, the five year production average from 2014 to 2018 was selected. Therefore, the City’s current water supply from Ventura River / Foster Park is 2,323 AFY for calendar year 2019.

- **Mound Groundwater Basin:** Due to operational constraints, production from the Mound Basin has been lower than the historical 10 year average for the Normal Water Supply. To determine the City’s
current water supply with the existing drought conditions, the two year production average from 2017 to 2018 was selected. This date range was selected since it reflects recent operational constraints due to the current condition of the City’s existing wells in this basin. Therefore, the City’s current water supply from the Mound Basin is 1,963 AFY for calendar year 2019.

- Oxnard Plain Groundwater Basin (Fox Canyon Aquifer): Per approval of Emergency Ordinance E in 2014, the City’s Temporary Extraction Allocation (TEA) is 4,827 AFY (based on an operator’s average annual reported extractions for 2003 through 2012). Phased reductions were set beginning July 1, 2014 with a 20% total reduction of the TEA on January 1, 2016. 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. Therefore, the City’s current water supply from the Oxnard Plain is 3,862 AFY for calendar year 2019.

- Santa Paula Groundwater Basin (Santa Paula Basin): The Santa Paula Basin Judgment allows the City to utilize 3,000 AFY. No reductions to this supply is anticipated for this year; therefore, the City’s current water supply from the Santa Paula Basin is 3,041 AFY (includes City acquired water rights) for calendar year 2019.

- Recycled Water: As stated in the 2015 Urban Water Management Plan, the City’s projected annual recycled water demand for 2019 is approximately 700 AFY. Therefore, the City’s current recycled water demand is 700 AFY for calendar year 2019.

The City’s current water supply for 2019 (drought) is 15,651 AF and summarized in Table 4-2.

The above evaluation of the current conditions of each water supply source along with the triggers outlined in the Water Shortage Event Contingency Plan (WSECP) (see Section 5) indicates that the City remains in a water shortage event following consecutive years of drought. The WSECP specifies that the water shortage stage trigger is calculated by comparing the Annual Supply Projection to the Normal Year Supply Projection. The WSECP also states that the Normal Year Supply Projection will not change for the duration of the shortage event. The annual supply projection from Table 4-2 in the 2019 CWRR is 15,651 AFY. The normal year supply projection from Table 4-1 of the 2013 CWRR is 19,600 AFY. Therefore, the annual supply projection is 20.15% below normal year supply and the City remains in a Stage 3 Water Shortage Event.

Projected Future Water Supply
The City’s projected future water supply numbers forecasts an additional two years of drought through 2021 (for a total duration of a 10 year drought) and evaluates supply through 2030. The projected future water
supply also assumes that the City will revert to normal conditions in 2025 through 2030. The City’s projected future water supply takes into account impacts from the Sustainable Groundwater Management Act of 2014. The City’s projected future water supply is summarized in Table 4-3.

- **Casitas**: As mentioned previously, Casitas is currently in a Stage 3 water supply condition. This report assumes a reduction of 30% to the City’s Casitas supply for the 2020 Supply Drought Impact and a 40% reduction for 2021. Therefore, the City’s projected supply from Casitas for 2020 is 3,844 AFY (30% reduction) and 3,365 AFY in 2021 (40% reduction). The Casitas projected supply in 2025 and 2030 includes growth projections within Casitas’ boundaries. Therefore, the City’s projected supply from Casitas is 5,904 AFY for 2025 and 6,067 AFY for 2030.

- **Ventura River/Foster Park**: If the current drought continues through 2021, the supplies will be further impacted. To determine the 2020 and 2021 supply drought impact, the average of the two most recent driest years (2015 and 2016) was used for the projections. Therefore, the projected future water supply for 2020 and 2021 from the Ventura River / Foster Park is 1,573 AFY. The 2025 and 2030 projected future water supply assumes normal conditions. The 2018 Capital Improvement Program includes the Foster Park Wellfield Production Restoration project, which is scheduled to be completed by 2025. The project involves the replacement of the destroyed wells and construction of new facilities to restore historic production capabilities of 6,700 AFY. The low end equals the City's highest production value for the past 10 years (2009 to 2018), and the high end equals the expected production from the completed Foster Park Wellfield Production Restoration project. Therefore, the projected future water supply for 2025 and 2030 from the Ventura River / Foster Park is 3,647 – 6,700 AFY.

- **Mound Groundwater Basin**: Mound Wells 2 and 3 are anticipated to come online within the next few years. Thus, the projected water supply from the Mound Basin for the future is greater than the current 2019 supply of 1,963 AFY (discussed in the Current Supply section above). Although 2020 and 2021 future projections are evaluated under drought impact, the addition of Mound Wells 2 and 3 will help alleviate current operational constraints. Since Mound Well 3 is expected to be operational in 2020, the 10 year average (2000 to 2009) was used to calculate the 2020, 2021, 2025 and 2030 supply numbers. Therefore, the projected future water supply from the Mound Basin from 2020 to 2030 is 4,000 AFY.

- **Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)**: As discussed in the Current Water Supply section, the City’s allocation is 3,862 AFY until further action is taken by the FCGMA. Therefore, the projected future supply from the Oxnard Plain Basin for 2020, 2021, 2025, and 2030 is 3,862 AFY.
• **Santa Paula Groundwater Basin (Santa Paula Basin):** As discussed previously, the Santa Paula Basin is subject to a stipulated judgment and is managed by the Santa Paula Basin Technical Advisory Committee (TAC) with equal representation from UWCD, SPBPA, and the City. The TAC is charged with various responsibilities including establishing a program to monitor conditions in the basin. If basin conditions change, then the City may have reductions in pumping allocations. Stage 2 reduces the City’s pumping to 1,141 AFY, Stage 3 reduces the City’s pumping allocations to 641 AFY, Stage 4 reduces the City’s pumping allocations to 481 AFY and Stage 5 reduces the City’s allocations to zero. Currently, the TAC is working on various basin management measures, including potential triggers for the above stages and potential projects to enhance the sustainable yield of the basin.

Based on recent work completed by the technical working group regarding conditions in the Basin, it is projected that no Stage reductions will be implemented even if the drought remains in effect through 2021. It is also projected that under normal conditions in 2025 to 2030, that the allocation will remain at 3,000 AFY. Additional water rights of 40.9 AF total were acquired for the past development of Tract 4632, Phase I of Tract 5632, and Tract 5774.

Therefore, the projected future water supply in 2020, 2021, 2025 and 2030 is 3,000 AFY for the original City allocation and 40.9 AFY for City acquired water rights.

• **Recycled Water:** The estimated anticipated future water supply for recycled water is based on the 2015 Urban Water Management Plan projections for recycled water.

• **VenturaWaterPure:** The City of Ventura is currently in the planning phases for the proposed VenturaWaterPure Project which includes additional diversion of tertiary treated effluent to a new Advanced Water Purification Facility (AWPF) for potable reuse. Potable reuse is the proven use of recycled water to supplement drinking water supplies. After years of special studies, environmental assessment, demonstration facility testing, and stakeholder meetings, the City determined the best way to enhance environmental protection while improving local water quality and supply reliability is to divert highly treated wastewater discharges for reuse. The final product of this state-of-the-art AWPF would be a new, locally owned source of highly purified drinking water that provides Ventura with a long-term drought resilient water supply solution. On March 6, 2019, the City released the Ventura Water Supply Projects Draft Environmental Impact Report (EIR) for public review and written comment. Upon completion of the environmental review process, the next steps include permitting, final design, and bidding for construction.

One objective of the VenturaWaterPure Project is to protect the ecology of the Santa Clara River
Estuary (SCRE). The City is party to a Consent Decree that expresses the City’s commitment to pursue “environmentally protective, sustainable, and integrated water supply and wastewater discharge practices... [including] infrastructure options for Ventura’s reclamation and diversion of an ecologically appropriate volume” of tertiary-treated flows produced by the existing Ventura Water Reclamation Facility (VWRF) and currently discharged to the SCRE. The Consent Decree requires such diverted flows to be dedicated to “water reclamation uses,” including local water supply augmentation to the maximum extent feasible.

The City has conducted extensive analysis of the SCRE, including estimated ecological effects of reduced discharges on the SCRE. This analysis is compiled in several reports and reviews mandated by the Consent Decree, including the Phase 1, 2, and 3 Studies, the Technical Review Team (TRT) Report, the Scientific Review Panel (SRP) Final Report, and the TRT review supporting the conclusions and recommendations in the SRP Final Report.

Based on the scientific record and feedback from the agencies, the City is proposing additional phasing to the implementation approach that would commit to a Continued Discharge Level (CDL) of 1.9 MGD by the end of year 2025, with a planned reduction to a CDL of 0 to 0.5 MGD during closed berm conditions by the end of year 2030. This phased implementation approach is the basis of the proposed project’s designed flow rate and minimum treatment capacity.

Based on the completion of the Special Studies and additional assessments detailed in the Draft EIR, the future water supply provided by the VenturaWaterPure Project is projected to be 2,800 AFY in 2025 and 2,800 AFY to 4,000 AFY in 2030.

- **State Water Project:** The City has a 10,000 acre-foot per year allocation from the California State Water Project (SWP). To date, the City has not constructed the improvements necessary to receive direct delivery of its allocation. Ventura Water is pursuing the State Water Interconnection Project with Calleguas Municipal Water District (Calleguas), Casitas Municipal Water District (Casitas), and United Water Conservation District (United). In 2017, City Council authorized an alignment study by Kennedy/Jenks to determine how the interconnection project can be designed and operated to supply water to serve the regional needs of the City, Calleguas, Casitas, and UWCD. The final alignment study was completed in 2018. A Draft Environmental Impact Report (EIR) was prepared to evaluate the potential environmental impacts associated with construction and operation of the interconnection pipeline and associated facilities. The Draft EIR was circulated for a 45-day public review period on February 19, 2019. As stated in the Draft EIR, the project will enable delivery of SWP water by wheeling through Metropolitan Water District of Southern California and Calleguas to the City. The connection will also facilitate direct delivery of SWP water to United and direct or in-lieu delivery of SWP water to Casitas. The interconnection will be an approximately 7 mile pipeline used to transport water between Calleguas’ and the City’s distribution systems.
The Draft EIR also states that, although the proposed State Water Interconnection Project is not anticipated to increase water supply volume for the City, it would improve system reliability by acting as a replacement supply source for existing water supplies (Lake Casitas, Ventura River, and groundwater) that have been reduced or have become less available. Additionally, SWP water is a near-term option for providing the necessary water to dilute high Total Dissolved Solids (TDS) levels in groundwater to improve system water quality. Operational details will be developed through the project design and planning process and negotiations with project partners. These details will be reflected in future CWRRs when available.

While the City's water supply contract for SWP water provides the City with a maximum annual allocation of 10,000 AF, the actual allocation of available water is set by California Department of Water Resources (DWR) annually. Based on historical allocations the range of available SWP water has been 5% to 100% over the last 25 years. Given the uncertainty of SWP deliveries and the fact that capacity in MWD and Calleguas’ systems must be available in order for water to be wheeled to the City, a range of zero to full allocation of the City’s entitlement was selected for 2025 and 2030 projected supplies. Therefore, the projected available water supply in 2025 and 2030 for SWP water delivered by the State Water Interconnection Project is estimated to be 0-10,000 AFY.

Potential Additional Future Supply
This section describes any planned or proposed projects which may affect the water supply sources for the City.

- **Ocean Desalination:** At this time, Project 74070 Advanced Wastewater Treatment Plant Land Acquisition is listed in the City's Adopted 2016-2022 CIP. The land acquisition is for the expansion of the City’s water supply for the construction of potential advanced water purification facilities for potable reuse and/or desalination. The project’s time schedule includes planning from 2016 through 2019.

  According to the Ventura Water Supply Projects Draft Environmental Impact Report released March 6, 2019, if sufficient water is not available from the diversion of discharges to the SCRE, then the City may need to develop desalination facilities to meet 2035 water supply needs. This would be accomplished through either the expansion of the AWPF as a first option pending regulatory approvals, or, if this option is not approved or does not meet the City’s water supply needs, through construction of an ocean desalination facility. Since details of the ocean desalination project is in a preliminary stage, ocean desalination is identified as a potential additional future supply source.
CONCLUSION

The results of this Report indicate that, in the near term, the spread between the current water demand and the current water supply is very tight. If the continued drought condition persists, the supply could be less than the demand. The City’s customers will need to continue to conserve and/or pay penalties for overuse of the City’s water supply sources while the City secures new water supplies. This presents short-term challenges for the City as it continues to allocate water supply to development projects that will generate additional water demands. The City will continue to perform the following on an annual basis and publish the results in the annual Comprehensive Water Resources Report:

1. Provide total water consumption for the previous calendar year.
2. Recalculate the 3-year, 5-year and 10-year water consumption averages.
3. Update the water supply portfolio.
4. Update the existing land use data.
5. Evaluate all future development projects based on current supply and demand conditions.
6. 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.
7. Continue to develop water supply through demand side management, secure water rights, administer the Water Rights Dedication and Water Resource Net Zero Ordinance as approved in July 2016 and continue to integrate the new water supply sources into the City’s water supply portfolio.

The City has always worked to address long-term water demands with effective planning and development of additional future water supplies. As discussed earlier, the City currently has two proposed water supply projects in the planning stages: VenturaWaterPure and the State Water Interconnection Project, which together would ensure that the City has adequate supplies for future demand under various climatic conditions. In planning for these projects, the City must consider the uncertainty in both the demand projections and the supply projections. Current demand projections assume that the conservation that has occurred during the multi-year drought that began in 2013 will continue into the future. While the City continues to encourage conservation and the State has passed legislation to encourage “conservation as a way of life”, the City has limited control over the amount of water its citizens utilize. In Section 6 of the report, Table 6-3 summarizes the uncertainty and sensitivity to climate variations of each water supply source, which illustrate that the City’s water supplies are vulnerable to many factors outside of the City’s control. Consequently, water supply projections past 2021 are highly uncertain. Table 6-4 presents additional water supply scenarios to illustrate the vulnerability of the City’s existing water
supplies and how the water supplied by the proposed State Water Interconnection and VenturaWaterPure projects would be utilized to meet water demands in the future. Figure 6-2 illustrates the potential future water supply scenarios presented in Table 6-4.
# Table of Contents

1. **INTRODUCTION** ............................................................................................................. 1-1
   A. Background .................................................................................................................. 1-1
   B. Purpose of the Report .................................................................................................. 1-1
   C. Study Area .................................................................................................................... 1-2
   D. Demand Factors ........................................................................................................... 1-3
   E. Current Planning Data .................................................................................................. 1-3
   F. Glossary .......................................................................................................................... 1-4

2. **LAND USE** ............................................................................................................. 2-1
   A. Background .................................................................................................................. 2-1
   B. Existing Land Use ........................................................................................................ 2-1
   C. Future Land Use ........................................................................................................... 2-6
      1. Under Construction and Approved ........................................................................... 2-6
      2. Future Potential ........................................................................................................ 2-6

3. **WATER DEMANDS** ................................................................................................. 3-1
   A. Existing Demand Condition ........................................................................................ 3-1
   B. Consumption and Usage Factors ............................................................................... 3-2
   C. Usage Factor Comparison ......................................................................................... 3-5
   D. Historical Water Consumption (Baseline Demand Condition) ................................. 3-7
   E. Future Demand Projections (Approved Projects Only) .............................................. 3-10

4. **WATER SUPPLY** ...................................................................................................... 4-1
   A. Introduction .................................................................................................................. 4-1
   B. Normal (Non-Drought) Water Supply ...................................................................... 4-3
      1. Casitas Municipal Water District ............................................................................ 4-3
      2. Ventura River Surface Water Intake and Upper Ventura River Groundwater Basin . 4-4
      3. Mound Groundwater Basin ...................................................................................... 4-5
      4. Oxnard Plain Groundwater Basin ............................................................................ 4-6
      5. Santa Paula Groundwater Basin .............................................................................. 4-6
      6. Recycled Water ........................................................................................................... 4-7
   C. Current Water Supply .................................................................................................. 4-9
# TABLE OF CONTENTS

1. Casitas Municipal Water District ................................................................. 4-9
2. Ventura River Surface Water Intake and Upper Ventura River Groundwater Basin 4-10
3. Mound Groundwater Basin ........................................................................ 4-10
4. Oxnard Plain Groundwater Basin .............................................................. 4-10
5. Santa Paula Groundwater Basin ................................................................. 4-11
6. Recycled Water ......................................................................................... 4-11

D. Future Water Supply .................................................................................. 4-13
1. Casitas Municipal Water District ................................................................. 4-13
2. Ventura River Surface Water Intake and Upper Ventura River Groundwater Basin 4-14
3. Mound Groundwater Basin ........................................................................ 4-16
4. Oxnard Plain Groundwater Basin .............................................................. 4-17
5. Santa Paula Groundwater Basin ................................................................. 4-17
6. Recycled Water ......................................................................................... 4-18
7. VenturaWaterPure ...................................................................................... 4-18
8. State Water Project ..................................................................................... 4-20

E. Potential Additional Future Supply Sources ................................................. 4-24
1. Ocean Desalination ..................................................................................... 4-24

5. PROGRAMS AND POLICIES ................................................................. 5-1

A. Introduction ................................................................................................. 5-1
1. Water Conservation Measures/Water Efficiency Plan ......................... 5-1
2. Water Shortage Task Force ....................................................................... 5-3
3. Water Shortage Event Contingency Plan ............................................... 5-3
5. Water Commission .................................................................................... 5-6

6. CONCLUSIONS & DISCUSSION ......................................................... 6-1

A. Conclusions ............................................................................................... 6-1
B. Discussion ................................................................................................. 6-5
LIST OF TABLES

1-1 Summary of Previous Documents
2-1 Existing Land Uses per 2005 General Plan
2-2 Summary of “Built” Projects 2005-2012
2-3 Summary of Existing Land Use – December 2018
2-4 Summary of Approved and Under Construction Projects – December 2018
2-5 Summary of Predicted, Actual and Remaining Development – December 2018
3-1 Summary of Existing Water Consumption for CY 2018
3-2 Calculation of Raw Consumption Factors for CY 2012
3-3 Summary of Planning-Level Water Consumption Factors
3-4 Water Consumption Factor Comparison
3-5 Historical Annual Water Consumption
3-6 Total Estimated Demands for Under Construction and Approved Projects – as of December 2018
3-7 Projected Total Water Demands Including Under Construction and Approved Projects – Various Baselines
3-8 Projected Water Demand Growth
4-1 Summary of Normal Water Supply 2019
4-2 Summary of Current Water Supply 2019
4-3 Summary of Projected Future Water Supply from Existing and Potential New Sources
6-1 Demand vs. Supply Comparison
6-2 Comparison of Demand Projections
6-3 Supply Sources – Possibilities, Challenges, and Uncertainties
6-4 Potential Future Water Supply Scenarios

LIST OF FIGURES

1-1 City Overview
2-1 General Plan Land Use
2-2 Projects Approved and Under Construction – December 2018
3-1 Historical Annual Water Consumption
4-1 Supply Sources
4-2 VenturaWaterPure Timeline
6-1 Demand vs. Supply Comparison
6-2 Potential Future Water Supply Scenarios
1. INTRODUCTION

A. BACKGROUND

In the western United States, water resources are challenged by drought conditions, ecosystem habitat protection, and water quality concerns. The City of San Buenaventura (City) is no exception. Changing pressures on our local water sources have driven the need to create a more integrated approach to our water supply, demand, and infrastructure management. In 2010, a workshop on the City’s water supply issues was held. As a result of the workshop, City Council directed the City to provide a comprehensive evaluation of current and projected water supply needs. Following this recommendation, Ventura Water and the Community Development Department worked together in late 2012 and early 2013 to provide input and expertise on what development had taken place since the 2005 General Plan through 2012, the projects currently approved for development within the City and the potential for additional development through 2025.

In order to better determine the water demands from those developments, three existing documents were reviewed: 1) 2005 General Plan, 2005 General Plan Final Environmental Impact Report (FEIR) and 2007 Supplement, 2) 2010 Urban Water Management Plan (amended in 2011), and 3) 2011 Water Master Plan. The purpose of the review was to compare land use data (if applicable) and historical figures and future projections for water demand and water supply. A review of the three documents showed differences as each report was completed at a different time, with different data available, and for a specific purpose and/or audience. A summary of the purpose of the three reports and comparison for land use, water supply, and water demand is depicted in Table 1-1.

To reconcile the differences in the historical documents and establish a baseline of conditions in the City in 2012, Ventura Water and Michael Baker (formerly RBF Consulting) worked together to determine existing land use, existing demands, and normal supply. In order to look at future projections for land use, assumptions were made about future development (discussed further in the Land Use Section). In order to resolve conflicts identified in the previous reports related to future water supply/water demand projections, new demand factors were calculated based on calendar year 2012 data (refer to Water Demand Section D below). Thus, the first Comprehensive Water Resources Report was developed in June 2013.

B. PURPOSE OF REPORT

In 2013, the Comprehensive Water Resources Report (CWRR) was developed as an annual water management tool. The CWRR is intended to be a tool in the development review process as it
pertains to water supply and demand. The CWRR provides an annual look at the City’s water demand trends, current water demands, demand projections, and the current and future supply picture. The purpose of the CWRRs is to track proposed development projects, consistently calculate the anticipated increase in water demand associated with each proposed development project, and then evaluate the impact on the current water supply. The CWRRs specifically focus on water demand of approved (entitled) projects and on near-term demand changes. The annual CWRRs are an important tool that the City utilizes to update the City’s annual projected water supply and demand outlook. The 2013 CWRR was approved by City Council in June 2013.

The 2013 CWRR was the first annual version of this report and included historical information related to the genesis of this report and previous studies prepared. The subsequent 2014 to 2017 CWRRs were prepared as supplements to the previous year’s document and approved by City Council. Background information provided in the 2013 CWRR that did not change was not included in the 2014 to 2017 CWRRs. Beginning with the 2018 CWRR, the CWRR will be a stand-alone document that will include relevant information from the original 2013 CWRR, updates to existing land use information, water demand data based on the previous calendar year’s data, and 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 projections will also be updated in order to capture the current water use patterns within the City.

C. STUDY AREA

The City of San Buenaventura is located 62 miles north of Los Angeles and 30 miles south of Santa Barbara along the California coastline. The City is located within the County of Ventura, and bounded by the City of Oxnard to the south, by unincorporated Ventura County to the east and north, and by the Pacific Ocean to the west. The northwest portion of the City is bounded by the Ventura River, while the southern portion is bounded by the Santa Clara River. The Ventura Freeway (101) bisects the City in the north-south direction, while the Santa Paula Freeway (126) runs east to west through the center of the City. The Ojai Freeway (33) runs along the northwestern edge of the City. The City currently occupies an estimated 21 square miles and has an estimated population of 109,000 persons. Figure 1-1 identifies the City of San Buenaventura boundary, the Sphere of Influence and General Plan boundary.

At this time Ventura Water provides potable water service to a population of approximately 113,500 persons and has approximately 32,000 service connections. The City’s existing water service area includes all portions within the City limits, as well as portions of unincorporated Ventura County that meet the City’s policy for water connections outside City limits (Municipal Code Section
Ventura Water also operates the Saticoy Country Club (SCC) water system, which consists of residences and country club facilities that are located east of the City. They have their own stand-alone system, which includes three groundwater wells, a booster pump station and two storage tanks. The ownership responsibility for the system is shared between the City and SCC (1/3 and 2/3, respectively). The SCC system has a separate Domestic Water Supply Permit from the California Department of Public Health.

D. DEMAND FACTORS

Demand factors are used to calculate the future water demand projections. Demand factors are either land use based (per area (acre/ksf) or per dwelling unit) or population based (per capita). Demand factors are typically derived from actual water consumption data, and a safety factor is applied for planning purposes.

City-specific water demand factors were calculated in the 2013 CWRR. For a full discussion, refer to Section 3 – Water Demands. These demand factors have been used in the 2013 CWRRs and all subsequent CWRRs. It should be noted that the water demand factors calculated in the 2013 CWRR will not be updated on an annual basis. The water demand factors will be re-visited every 10 years, unless there is a significant change in the year-over-year annual demand (quantified as a 30% in two-year period).

E. CURRENT PLANNING DATA

The Community Development Department maintains a database of all projects that are in the planning, design or construction phase. These projects are known as the “Pending Projects.” The pending projects database is updated periodically as new projects are proposed or existing projects are modified.

The Department provided actual development data ("Built" projects) for the year ending December 2018, and data on all projects that are under construction or have received all planning approvals ("Approved" projects) for development, as of December 31, 2018. 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, 2018 were not considered in the future water demand projections for this Report.
F. GLOSSARY

*Drought condition* – Hydrologic conditions during a defined period, greater than one dry year, when precipitation and runoff are much less than average. (Department of Water Resources) Further discussion of drought is included in Section 5 of the report.

*Normal Supply* – A normal (non-drought) supply is defined by the City’s 2015 Water Shortage Event Contingency Plan (WSECP). When the stages of the 2015 WSECP are not activated, the City is experiencing normal supply conditions. In addition, under normal supply conditions, it is assumed that City facilities are fully functioning and not restricted for operational reasons.

*Sustainable yield (safe yield)* – The maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result. (Sustainable Groundwater Management Act (SGMA))

*Water Shortage Event* – A water shortage event can be a single occurrence as short as twenty-four hours to a multi-year weather condition. Other events, besides drought, that could trigger a water shortage event include an earthquake, water system failures, fire, contamination, regional power outage, State restrictions, or other causes. (WSECP)

*Water Shortage Stages* – Per the WSECP, the six water shortage stages may be activated when the Annual Supply Projection (Table 4-2 of the most current CWRR) is below the Normal Year Supply Projection (Table 4-1 of the 2013 CWRR) at varying trigger levels. The WSECP noted that the baseline supply value will not change through the duration of the event; thus, Table 4-1 of the 2013 CWRR is the baseline supply value since the City has remained in a Stage 3 since 2014.
## TABLE 1-1: SUMMARY OF PREVIOUS DOCUMENTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 General Plan, GP FEIR and 2007 Supplement</td>
<td>21,566</td>
<td>26,300</td>
<td>28,262</td>
<td>28,262</td>
<td>28,262</td>
<td>28,262</td>
<td>Table 1 of the 2004 Biennial Water Supply Report</td>
</tr>
<tr>
<td></td>
<td>[1]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Based on actual water production data thru 2003</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Future projections based on assumptions and limitations for each supply source</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>known at the time (2004)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- [1] Figure includes 1,129 AFY for raw water and oil operation use</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Figures do not include recycled water</td>
</tr>
<tr>
<td>2010 Urban Water Management Plan</td>
<td>n/a</td>
<td>n/a</td>
<td>20,600</td>
<td>22,000</td>
<td>24,600</td>
<td>24,700</td>
<td>Table 3-2 of the 2010 UWMP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Water production data for 2010 is based on annual average data from 2000 - 2009 as</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>presented in Table V-14 of the 2011 WMP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Future projections based on assumptions and limitations for each supply source</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>known at the time (2011)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Figures do not include raw water and oil operation use</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Figures do not include recycled water</td>
</tr>
<tr>
<td>2011 Water Master Plan</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>18,760</td>
<td>Tables ES-2, V-1, V-2, V-7, V-10, V-13 and V-14 of 2011 WMP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25,800</td>
<td>- Based on actual water production data thru 2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Future projections based on assumptions and limitations for each supply source</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>known at the time (2011)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Figures do not include raw water and oil operation use</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Figures do not include recycled water</td>
</tr>
<tr>
<td>2010 Urban Water Management Plan</td>
<td>n/a</td>
<td>20,808</td>
<td>17,351</td>
<td>22,286</td>
<td>23,256</td>
<td>24,270</td>
<td>Table 2-5 of the 2010 UWMP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Based on actual water consumption data through 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Historical population based on California Department of Finance Table E-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Growth rate in City = 0.88%, outside City = 0.1258% connections</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Water Use Factor = 168 gpcd = 0.188 AFY/capita</td>
</tr>
<tr>
<td>2011 Water Master Plan</td>
<td>n/a</td>
<td>16,190</td>
<td>17,896</td>
<td>n/a</td>
<td>n/a</td>
<td>22,708</td>
<td>Table IV-5 and Figure IV-2 of the 2011 WMP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Based on actual billing records from 2004-2005.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Near-term projections (allocated to 2010) based on actual billing data from 2004-2005, calculated demand factors from the same period applied to the 2006 Pending Projects list.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Long-term projections (allocated to Year 2025) based on applying the calculated demand factors to the remaining developable land as identified in the 2005 GP, excluding the land accounted for in the 2006 Pending Projects list.</td>
</tr>
</tbody>
</table>
City Overview

Legend
- Location Sites
- Ventura City Limit
- General Plan Boundary
- City Sphere of Influence

Source: Eagle Aerial, 2010

Figure 1-1
2. LAND USE

A. BACKGROUND

In order to determine the existing land use make-up within the City's water service area as of year-end 2012 for the 2013 CWRR, the land use data published in the 2005 General Plan was used as a starting point. Table 2-1 provides a summary of the development as of year-end 2004 within the General Plan land use categories in dwelling-unit count and square footage. Figure 2-1 depicts the land use designations throughout the City as identified in the 2005 General Plan. Table 2-2 summarizes data for all projects built from 2005-2012, which breaks land uses down into non-residential categories and residential categories. The City Planning Department provided a listing of all projects "built" from 2005-2012, including back-up data. Minor modifications and adjustments were made based on supplemental data provided by Ventura Water staff. In addition, square footages for parking garages were eliminated from the list since the land use does not consume water.

B. EXISTING LAND USE

Table 2-3, which has been updated on an annual basis since 2013, provides a summarized total of the existing land use within the City service area. For the purposes of this report, the existing land use picture is considered the year-end of 2018. In order to determine the existing land use make-up within the City's water service area as of year-end 2018, all known development projects constructed and utilizing water within Calendar Year 2018 were added to the land use data published in the 2018 CWRR for the year-end 2017. 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
Existing Land Uses per 2005 General Plan[1]

<table>
<thead>
<tr>
<th>Planning Designation</th>
<th>Allowed Density (du/acre)</th>
<th>Existing Development as of 2004</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Single Family (Units)</td>
<td>Multi Family (Units)</td>
<td>Non-Residential (SF)</td>
<td></td>
</tr>
<tr>
<td>Neighborhood Low</td>
<td>0-8</td>
<td>19,425</td>
<td>3,335</td>
<td>49,386</td>
<td></td>
</tr>
<tr>
<td>Neighborhood Medium</td>
<td>9-20</td>
<td>1,163</td>
<td>8,965</td>
<td>149,513</td>
<td></td>
</tr>
<tr>
<td>Neighborhood High</td>
<td>21-54</td>
<td>814</td>
<td>2,468</td>
<td>194,143</td>
<td></td>
</tr>
<tr>
<td>Commerce</td>
<td></td>
<td>257</td>
<td>490</td>
<td>4,995,248</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td>29</td>
<td>31</td>
<td>8,299,840</td>
<td></td>
</tr>
<tr>
<td>Public and Institutional</td>
<td></td>
<td>4</td>
<td>0</td>
<td>54,422</td>
<td></td>
</tr>
<tr>
<td>Park and Open Space</td>
<td></td>
<td>6</td>
<td>0</td>
<td>15,491</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
<td>4</td>
<td>0</td>
<td>19,550</td>
<td></td>
</tr>
<tr>
<td>Downtown Specific Plan</td>
<td>21-54</td>
<td>332</td>
<td>1,543</td>
<td>1,795,401</td>
<td></td>
</tr>
<tr>
<td>Harbor District</td>
<td></td>
<td>0</td>
<td>310</td>
<td>350,160</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>22,034</strong></td>
<td><strong>17,142</strong></td>
<td><strong>15,923,154</strong></td>
<td></td>
</tr>
</tbody>
</table>

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

Note: Areas prone to flooding are shown on Figure 7-1 in Chapter 7.

Neighborhood
- Low (up to 8 du/ac)
- Medium (9-20 du/ac)
- High (21-54 du/ac)

- Commerce
- Agriculture
- Industry
- Parks and Open Space
- Public and Institutional
- Specific Plan Area
- Corridors, Neighborhood Centers (NC)
- Districts
- City Limits
- Planning Communities
- California Coastal Zone Boundary

This map is a product of the City of San Buenaventura, California. Although reasonable efforts have been made to ensure the accuracy of this map, the City of San Buenaventura cannot guarantee its accuracy.
## Table 2-2

### Summary of "Built" Projects 2005-2012

<table>
<thead>
<tr>
<th>Category</th>
<th>Non-Residential</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RETAIL/OFFICE (SF)</td>
<td>INDUSTRIAL (SF)</td>
</tr>
<tr>
<td><strong>DISTRICTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper North Avenue</td>
<td>0</td>
<td>18,619</td>
</tr>
<tr>
<td>North Avenue</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Downtown Specific Plan</td>
<td>56,891</td>
<td>0</td>
</tr>
<tr>
<td>Pacific View Mall</td>
<td>14,824</td>
<td>0</td>
</tr>
<tr>
<td>Harbor</td>
<td>201</td>
<td>0</td>
</tr>
<tr>
<td>Arundel</td>
<td>108,473</td>
<td>71,006</td>
</tr>
<tr>
<td>North Bank</td>
<td>97,774</td>
<td>500,132</td>
</tr>
<tr>
<td>Montalvo</td>
<td>0</td>
<td>270</td>
</tr>
<tr>
<td>Salton</td>
<td>438</td>
<td>0</td>
</tr>
<tr>
<td><strong>Subtotal (Districts)</strong></td>
<td>274,340</td>
<td>590,911</td>
</tr>
<tr>
<td><strong>CORRIDORS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventura Avenue</td>
<td>7,086</td>
<td>0</td>
</tr>
<tr>
<td>Main Street</td>
<td>2,072</td>
<td>0</td>
</tr>
<tr>
<td>Thompson Boulevard</td>
<td>18,784</td>
<td>0</td>
</tr>
<tr>
<td>Loma Vista</td>
<td>19,541</td>
<td>0</td>
</tr>
<tr>
<td>Telegraph Road</td>
<td>5,503</td>
<td>0</td>
</tr>
<tr>
<td>Victoria Avenue</td>
<td>64,775</td>
<td>163,328</td>
</tr>
<tr>
<td>Johnson Drive</td>
<td>840</td>
<td>0</td>
</tr>
<tr>
<td>Wells Road</td>
<td>2,816</td>
<td>0</td>
</tr>
<tr>
<td><strong>Subtotal (Corridors)</strong></td>
<td>121,417</td>
<td>163,328</td>
</tr>
<tr>
<td><strong>SPHERE OF INFLUENCE(SOI/Other Infill/Neighborhood Centers)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101/126 Agriculture</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wells/Saticoy</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pierpoint</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other Neighborhood Centers</td>
<td>27,032</td>
<td>0</td>
</tr>
<tr>
<td>Second Units</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Underutilized</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vacant</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Subtotal (SOI/Other Infill/NC)</strong></td>
<td>27,032</td>
<td>0</td>
</tr>
<tr>
<td><strong>PLANNING COMMUNITIES (Not Included within District/Corridor/Center-above)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downtown</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ventura Ave/Westside</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Midtown</td>
<td>10,931</td>
<td>0</td>
</tr>
<tr>
<td>College (Telegraph/Loma Vista)</td>
<td>56,933</td>
<td>0</td>
</tr>
<tr>
<td>Telephone Road Corridor</td>
<td>6,320</td>
<td>0</td>
</tr>
<tr>
<td>Montalvo/Victoria</td>
<td>658</td>
<td>0</td>
</tr>
<tr>
<td>Salton/East End</td>
<td>26,436</td>
<td>0</td>
</tr>
<tr>
<td>Arundel</td>
<td>3,744</td>
<td>0</td>
</tr>
<tr>
<td>Juanamarla</td>
<td>689</td>
<td>0</td>
</tr>
<tr>
<td>Bermelita</td>
<td>1,499</td>
<td>0</td>
</tr>
<tr>
<td>Thills</td>
<td>13,370</td>
<td>0</td>
</tr>
<tr>
<td>Wells</td>
<td>87,618</td>
<td>0</td>
</tr>
<tr>
<td>Westside</td>
<td>9,216</td>
<td>0</td>
</tr>
<tr>
<td><strong>Subtotal (Planning Communities)</strong></td>
<td>217,414</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>640,203</td>
<td>754,239</td>
</tr>
</tbody>
</table>

Source: Development data provided by City 02/14/2013.
Note: Figures include the built projects only.
Table 2-3
Summary of Existing Land Use - December 2018

<table>
<thead>
<tr>
<th></th>
<th>Residential Single-Family (units)</th>
<th>Residential Multi-Family (units)</th>
<th>Non-Residential (sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing (as of 2005 General Plan)</td>
<td>22,034</td>
<td>17,142</td>
<td>15,923,154</td>
</tr>
<tr>
<td>Constructed (Built Projects 2005-2012)</td>
<td>543</td>
<td>1,369</td>
<td>1,394,442</td>
</tr>
<tr>
<td>Constructed (Built Projects 2013)</td>
<td>28</td>
<td>0</td>
<td>4,356</td>
</tr>
<tr>
<td>Constructed (Built Projects 2014)</td>
<td>0</td>
<td>0</td>
<td>147,060</td>
</tr>
<tr>
<td>Constructed (Built Projects 2015)</td>
<td>59</td>
<td>114</td>
<td>0.00</td>
</tr>
<tr>
<td>Constructed (Built Projects 2016)</td>
<td>0</td>
<td>40</td>
<td>7,360</td>
</tr>
<tr>
<td>Constructed (Built Projects 2017)</td>
<td>9</td>
<td>153</td>
<td>29,637</td>
</tr>
<tr>
<td>Constructed (Built Projects 2018)</td>
<td>34</td>
<td>154</td>
<td>394,783</td>
</tr>
<tr>
<td><strong>Total Existing Land Use (through 2018)</strong></td>
<td><strong>22,707</strong></td>
<td><strong>18,972</strong></td>
<td><strong>17,900,792</strong></td>
</tr>
</tbody>
</table>

[1] Per Table 2-1
[2] Per Table 2-2
[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)
[5] Per data provided by Ventura Water, Built Projects part of CY 2015 water demand:
   - PROJ-5211 Citrus Apartments; 54 Multi-Family Residential Units
   - PROJ-6355 Orchard Collection; 59 Single-Family and 60 Multi-Family Residential Units
[6] Per data provided by Ventura Water, Built Projects part of CY 2016 water demand:
   - PROJ-7286 Union Bank; 4,860 SF
   - PROJ-6187 Castillo Del Sol; 40 Affordable Housing Units and 2,500 SF Commercial
[7] Per data provided by Ventura Water, Built Projects part of CY 2017 water demand:
   - PROJ-03743 Cannery Row LLC; Mixed Use - 2,156 SF and 78 Multi-Family Residential Units
   - PROJ-01857 Hearthside - Jenven Village; 51 Condominiums
   - PROJ-7215 CMH Parking Structure; 1,399 SF Retail Liner
   - PROJ-7290 Santa Clara Courts; 24 Condominiums
   - PROJ-6098 La Barranca; 9 Single-Family Units
   - PROJ-10123 New Volkswagen Dealership; 21,975 SF
   - PROJ-8794 Uncle Don's Liquor; 725 SF Addition
   - PROJ-8641 Kia Addition; 3,382 SF
   - PROJ-10085 Kellogg Park Zone Change
[8] Per data provided by Ventura Water, Built Projects as part of CY 2018 water demand:
   - PROJ-1678 CMH New Hospital; 320,000 SF New and 230 Beds
   - PROJ-2008 Island View Apartments; 154 Apartments
   - PROJ-7213 398 S. Ash St. – Trailer Hotel; New Airstream Trailer Park (34 Units)
   - PROJ-10278 Subaru Dealership; Addition of 2,783 SF to Existing Dealership
   - PROJ-8479 Kaiser NWC Market and Valentine; New 72,000 SF Medical Center

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.
C. FUTURE LAND USE

The City maintains a database of projects that are in the City's planning process. The database includes all projects 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 staff. The Under Construction and Approved Projects as of December 31, 2018 are shown on Table 2-4. Table 2-4, updated on an annual basis, 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. Figure 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 2005-2018, 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 by the density.
<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Type</th>
<th>Project Name</th>
<th>Project Status</th>
<th>Location in Cities Municipal Water District (Y or Non)</th>
<th>Description of Project</th>
<th>Project Status</th>
<th>Total Demand (GPD)</th>
<th>Total Daily Demand (GPD)</th>
<th>Residential</th>
<th>Non-Residential</th>
</tr>
</thead>
</table>
### Table 2-4
Summary of Approved and Under Construction Projects - as of December 2018

| Project ID | Project Type | Project Name | Project Status | Located in | Description of Project | Land Use Type (SF) | Hospital (Units) | Office (SF) | Commercial (SF) | Industrial (SF) | Institutional (SF) | Total (SF) | Hospital (Bed) | Park (ac) | Single-Family (Units) | Multi-Family (Units) | Total (Units) | Total Daily Demand (GPD) | Total Annual Demand (AFY) |
|------------|--------------|--------------|----------------|------------|--------------------------|-------------------|----------------|--------------|---------------|----------------|----------------|----------------|--------------|--------------|----------------|----------------|----------------|----------------|-------------------|-------------------|
| PROJ-6044 | Commercial   | GOLF COURSE SELF STORAGE | All Planning Approvals | YES | New self storage facility | 914 | 0 | 0 | 0 | 0 | 914 | 0 | 0 | 0 | 242 | 0.25 |
| PROJ-4677 | Residential  | WESTSIDE RENAISSANCE | All Planning Approvals | YES | 50 Affordable senior apartments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 12,500 | 14.00 |
| PROJ-10640 | Residential  | RANCHO VERDE | Under Construction | NO | 6 office building units | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 24 | 6,000 | 6.72 |
| PROJ-5823 | Residential  | RIVERSIDE ST MULTI FAMILY | Under Construction | YES | 75 units, 100% affordable | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 23 | 5,750 | 6.44 |
| PROJ-10029 | Mixed Use | DEANUSA COURTS, 1685 N. VENTURA AVE (Previously New Urban Ventures) | All Planning Approvals | YES | Complete and delivered for residential conversion to apartments | 1,779 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 80 | 20,471 | 22.93 |
| PROJ-6272 | Residential  | NORTHBANK - VINCE DAILY | All Planning Approvals | NO | 1 apartment building | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 117 | 81 | 198 | 63,540 | 71.17 |
| PROJ-10810 | Commercial  | VICTORIA & MOON RETAIL CENTER | Under Construction | NO | 38,000 SF expansion of existing structures (approx. 9,100 SF) and development of 1,840 SF coffee kiosks and 6,350 SF building | 8,345 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,210 | 2.48 |
| PROJ-10666 | Commercial  | RIVIERA SHOPPING CENTER | Under Construction | NO | New 6,000 SF expansion of 2 buildings (5,010 SF and 1,027 SF respectively) | 13,337 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,535 | 3.94 |
| PROJ-10785 | Commercial  | 3811 OLIVAS PARK DR | All Planning Approvals | YES | 3-story office building consisting of 43 apartments & 3,200 SF retail | 1,200 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 43 | 11,060 | 12.40 |
| PROJ-8428 | Mixed Use | 1101 CARDS ST - GISLER RANCH MIXED USE | All Planning Approvals | YES | 2 building units & 43 apartment buildings | 2,301 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,228 | 6.99 |
| PROJ-6018 | Mixed Use | WORLD OIL - 1571 E. MAIN ST | All Planning Approvals | YES | 2 apartment units & 2,438 SF commercial | 2,438 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 1,396 | 1.56 |
| PROJ-8427 | Residential  | 11156-11172 CITRUS DR - CITRUS II | All Planning Approvals | NO | 1 apartment building | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | 78 | 19,500 | 21.84 |
| PROJ-7123 | Commercial  | 124 N. VENTURA AVE - 6 WAY MEAT MARKETING | All Planning Approvals | YES | New office storage | 0 | 0 | 0 | 0 | 0 | 0 | 3,906 | 3,906 | 0 | 0 | 0 | 1,020 | 1.10 |
| PROJ-11299 | Commercial  | 1500 E. MAIN ST - MOBILE GAS | All Planning Approvals | YES | Tenant improvements to divide into 3 spaces; addition of 3 shipping containers to be used for coffee shop, covered outdoor office & private commercial storage. Building is 3,000 s.f. | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 212 | 0.24 |
| PROJ-7132 | Commercial  | 324 E. MAIN ST - IRON AND RESIN FACADE CHG AND ADDITIONS | All Planning Approvals | YES | Tenant improvements to divide into 3 spaces; addition of 3 shipping containers to be used for coffee shop, covered outdoor office & private commercial storage. Building is 3,000 s.f. | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,325 | 1.40 |
| PROJ-11058 | Commercial  | 1717 PALM DR - SUEN A TLE | All Planning Approvals | NO | 5,000 SF addition to existing commercial structure | 5,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,262 | 2.33 |
| PROJ-10994 | Commercial  | 4480 MARSTON ST - STAR OF CA | All Planning Approvals | NO | 2-story office building | 8,359 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,262 | 2.33 |
| PROJ-6811 | Mixed Use | MABELLO HOLDINGS, NORTHBANK AND JOHNSTON | All Planning Approvals | YES | Mixed use: 305 apartment units and 5,000 s.f. commercial and 5,000 s.f. clubhouse | 10,000 | 0 | 0 | 0 | 0 | 0 | 0 | 300 | 300 | 79,193 | 88.68 |
| PROJ-10578 | Commercial  | DOWNTOWN SITE TRIANGLE | All Planning Approvals | YES | Complete and delivered for residential conversion to apartments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 46 | 58,689 | 67.71 |
| PROJ-7105 | Commercial  | THOMPSONS AND KALORAMA - 158 E. THOMPSON BLVD | All Planning Approvals | YES | New 3-story 45 unit residential building | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 45 | 11,250 | 12.60 |
| PROJ-5883 | Residential  | 1600 E. THOMPSON BLVD - THOMPSON CRUZ | All Planning Approvals | YES | New 3-story 45 unit residential building | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 | 3,000 | 3.28 |

**Total:**

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>Residential</th>
<th>Non-Residential</th>
<th><strong>Total</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (AFY)</td>
<td>1,079,096</td>
<td>1,346</td>
<td>2,425</td>
</tr>
<tr>
<td>Projects within Casitas MWD</td>
<td>22,472</td>
<td>38,982</td>
<td>61,454</td>
</tr>
<tr>
<td>Projects within City limits</td>
<td>171,366</td>
<td>158,984</td>
<td>330,350</td>
</tr>
</tbody>
</table>

---

[1] Not part of FY 2019 water consumption (connected to City water, no established water usage).
[3] Projects previously approved and revised.
[4] PROJ-10084 was an affordable component of the project and consisted of 24 farmworker apartments. It is now moving forward as PROJ-10410.
[5] PROJ-6044 includes 15 new condiminiums and conversion of existing commercial space to 18 unit Boutique B&B.
<table>
<thead>
<tr>
<th></th>
<th>Residential Development (units)</th>
<th>Non-Residential</th>
<th>Non-Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (sf)</td>
<td>Retail (sf)</td>
<td>Office (sf)</td>
</tr>
<tr>
<td>2005 General Plan Prediction [1]</td>
<td>8,318</td>
<td>1,241,377</td>
<td>1,213,214</td>
</tr>
<tr>
<td>Actual Development (Built 2005-2012) [2]</td>
<td>1,912</td>
<td>320,102</td>
<td>320,102</td>
</tr>
<tr>
<td>Constructed (Built 2013) [4]</td>
<td>28</td>
<td>4,356</td>
<td>0</td>
</tr>
<tr>
<td>Constructed (Built 2014) [4]</td>
<td>0</td>
<td>0</td>
<td>147,060</td>
</tr>
<tr>
<td>Constructed (Built 2015) [4]</td>
<td>173</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Constructed (Built 2016) [4]</td>
<td>40</td>
<td>0</td>
<td>7,360</td>
</tr>
<tr>
<td>Constructed (Built 2017) [4]</td>
<td>162</td>
<td>28,238</td>
<td>0</td>
</tr>
<tr>
<td>Constructed (Built 2018) [4]</td>
<td>188</td>
<td>74,783</td>
<td>0</td>
</tr>
<tr>
<td>Remaining Developable Land (as of end 2018)</td>
<td>5,815</td>
<td>813,899</td>
<td>738,693</td>
</tr>
<tr>
<td>Remaining Developable Land (through 2025)</td>
<td>2,398</td>
<td>661,277</td>
<td>719,859</td>
</tr>
</tbody>
</table>

[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.
Projects Approved and Under Construction (as of December 2018)

Legend
- Casitas Municipal Water District
- City Limits
- Water Projects

STATUS
- All Planning Approvals
- Under Construction

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

This map is a product of the City of San Buenaventura, California. While reasonable efforts have been made to ensure the accuracy of this map, the City of San Buenaventura cannot guarantee its accuracy.
3. WATER DEMANDS

A. EXISTING DEMAND CONDITION

The annual water consumption figures for the past ten years are provided in subsection 3.D.

Table 3-1 summarizes the total water consumption (potable, recycled, and untreated) for each consumption category within the City’s water service area for the most recent complete year of data, CY 2018. As shown in Table 3-1, the total water consumption for CY 2018 was 14,211 AFY, including the 5.0% water loss factor.

<table>
<thead>
<tr>
<th>City Consumption Category</th>
<th>Water Consumption (HCF) [1]</th>
<th>Water Consumption (gpm)</th>
<th>Water Consumption (gpd)</th>
<th>Water Consumption (AFY)</th>
<th>Water Consumption + 5.0% Loss (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>2,309,132</td>
<td>3,286.21</td>
<td>4,732,139</td>
<td>5,301</td>
<td>5,566</td>
</tr>
<tr>
<td>Multi Family</td>
<td>1,418,771</td>
<td>2,019.10</td>
<td>2,907,509</td>
<td>3,257</td>
<td>3,420</td>
</tr>
<tr>
<td>Commercial/Retail/Industrial/Hotel</td>
<td>1,250,090</td>
<td>1,779.05</td>
<td>2,561,828</td>
<td>2,870[2]</td>
<td>3,013</td>
</tr>
<tr>
<td>Hospitals</td>
<td>129,793</td>
<td>184.71</td>
<td>265,987</td>
<td>298</td>
<td>313</td>
</tr>
<tr>
<td>Parks/Landscape/Irrigation</td>
<td>400,556</td>
<td>570.05</td>
<td>820,865</td>
<td>920[4]</td>
<td>966</td>
</tr>
<tr>
<td>Total</td>
<td>5,895,525</td>
<td>8,390.13</td>
<td>12,081,788</td>
<td>13,534</td>
<td>14,211</td>
</tr>
</tbody>
</table>

[1] Source: HCF Consumption Data Tables (CY 2018)
[2] Includes 38.09 AFY of recycled water.
[3] Includes 5.18 AFY of recycled water.
[4] Includes 554.96 AFY of recycled water.
[5] “Other” category in the initial 2013 CWRR excluded water consumption data for certain specialized uses, such as temporary construction water and fire training usage, so as not to skew the demand factors calculated in 2013. This methodology was maintained for Table 3-1 in the 2014-2018 CWRRs. However,
staff added the specialized water consumption data into this category beginning with the 2019 CWRR to better reflect actual consumption. “Other” category now includes authorized consumption for miscellaneous uses that do not fit the definitions of the above consumption categories (i.e. oil industry use, temporary construction water, and fire training).

[6] Includes 54.93 AFY of untreated water.

B. CONSUMPTION AND USAGE FACTORS

Future water demands are calculated using available land use data and corresponding water demand factors. Prior to the 2013 CWRR, the City had been utilizing the water demand factors identified in the 2005 General Plan FEIR to calculate future water demands. However, City staff recognized that the demand factors identified in the FEIR are very conservative, planning-level factors. City staff felt it prudent to develop more accurate water demand factors based on recent, historical billing data.

Utilizing land use information quantified in Section 2, water consumption factors were calculated for each consumption category based upon the CY 2012 water consumption data. The consumption factor calculations excluded the water consumption data for any specialized, or non-typical, land uses so as not to skew the factors. A consumption factor was calculated for each of the water consumption categories, provided adequate consumption data and land use data was available. Due to an apparent inconsistency in the reported building area, the calculated factor for the “Public/Institutional” category was significantly higher than industry norms. Therefore, for the purposes of this Report, one factor was calculated for the “Non-Residential” customers, which included the “Commercial/Retail/Industrial/Hotel” category and the “Public/Institutional” category. Table 3-2 provides detail for how each of the categories consumption factor was calculated. Please note, the calculations in Table 3-2 are considered “raw factors,” and do not factor in water loss or contingency.

The raw consumption factors were used as a basis to calculate a “Usage Factor,” or planning-level consumption factor. The usage factors adjust the consumption factors to include a 6.5% water loss factor, per the 2010 UWMP, and a 20% contingency (factor of safety) for planning purposes, which is consistent with industry standards/practices. Table 3-3 provides a summary of the water usage factors recommended for use in calculating all future water demands for projects where development densities are known.

It should be noted that the water demand factors in Table 3-3 are not updated on an annual basis. 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).
## Table 3-2
Calculation of Raw Consumption Factors for CY 2012

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family Res.</td>
<td>3,212,783</td>
<td>4,572.2</td>
<td>6,584,005</td>
<td>7,376</td>
<td>22,577</td>
<td>292 gpd/du</td>
<td></td>
</tr>
<tr>
<td>Multi-Family Res.</td>
<td>1,708,860</td>
<td>2,431.9</td>
<td>3,501,993</td>
<td>3,923</td>
<td>18,511</td>
<td>189 gpd/du</td>
<td></td>
</tr>
<tr>
<td>Commercial/Retail/Industrial/Hotel</td>
<td>1,491,845</td>
<td>2,123.1</td>
<td>3,057,260</td>
<td>3,425</td>
<td>17,318</td>
<td>206 gpd/ksf [3]</td>
<td></td>
</tr>
<tr>
<td>Public/Institutional</td>
<td>250,903</td>
<td>357.1</td>
<td>514,179</td>
<td>576</td>
<td></td>
<td></td>
<td>1,566 gpd/acre</td>
</tr>
<tr>
<td>Hospital/Assisted Living</td>
<td>96,261</td>
<td>137.0</td>
<td>197,269</td>
<td>221</td>
<td>465</td>
<td></td>
<td>424 gpd/bed</td>
</tr>
<tr>
<td>Park/Landscape/Irrigation [4]</td>
<td>398,875</td>
<td>567.7</td>
<td>817,421</td>
<td>916</td>
<td>522</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7,159,527</strong></td>
<td><strong>10,189.0</strong></td>
<td><strong>14,672,127</strong></td>
<td><strong>16,436</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[1] Per Table 3-1

[2] Per Table 2-3.

[3] "Public/Institutional" was consolidated with "Commercial/Retail/Industrial" because gross square footages could not be accurately broken out for the two categories.
### Table 3-3
Summary of Planning-Level Water Consumption Factors

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (0-8 du/ac)</td>
<td>292 gpd/du</td>
<td>311 gpd/du</td>
<td>370 gpd/du</td>
</tr>
<tr>
<td>Residential (9-20 du/ac)</td>
<td>189 gpd/du</td>
<td>201 gpd/du</td>
<td>250 gpd/du</td>
</tr>
<tr>
<td>Residential (21+ du/ac)</td>
<td>189 gpd/du</td>
<td>201 gpd/du</td>
<td>250 gpd/du</td>
</tr>
<tr>
<td>Public/Institutional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital/Assisted Living</td>
<td>424 gpd/bed</td>
<td>452 gpd/bed</td>
<td>545 gpd/bed</td>
</tr>
<tr>
<td>Park/Landscape/Irrigation</td>
<td>1,566 gpd/acre</td>
<td>1,668 gpd/acre</td>
<td>2,000 gpd/acre</td>
</tr>
</tbody>
</table>

[1] Per Table 3-2.
[2] “Public/Institutional” was consolidated with “Commercial/Retail/Industrial” because gross square footages could not be accurately broken out for the two categories.
[3] Per 2010 UWMP.
C. USAGE FACTOR COMPARISON

The water usage factors calculated for the City per the 2013 CWRR were compared with other southern California water agencies with similar characteristics – population, climate, water supply sources. These included local agencies such as the City of Simi Valley and the City of Thousand Oaks, as well as two other southern California agencies that have performed extensive research into calculating usage factors, the Irvine Ranch Water District and the Santa Margarita Water District. When compared to the other agency’s factors, the low and medium density residential factors and the parks/irrigation factor calculated for Ventura are on the low side. The high density residential factor and the non-residential factor are both on the high side. Although the factors are either on the low or high side when compared to other agencies, this is likely due to the way Ventura classifies the consumption categories for billing purposes. Overall, the demand factors calculated for the City in 2013 were within reason when compared to neighboring agencies. The comparison of water usage factors is shown on Table 3-4.
## Table 3-4

Water Consumption Factor Comparison

<table>
<thead>
<tr>
<th>Water Demand Factor Classification</th>
<th>Southern California Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Density Residential (2-4.5 du/ac)</td>
<td>-</td>
</tr>
<tr>
<td>Residential (0-8 du/ac)</td>
<td>370 gpd/du</td>
</tr>
<tr>
<td>Medium Density Residential (4.5-15 du/ac)</td>
<td>-</td>
</tr>
<tr>
<td>Residential (9-20 du/ac)</td>
<td>250 gpd/du</td>
</tr>
<tr>
<td>High Density Residential (15-30 du/ac)</td>
<td>-</td>
</tr>
<tr>
<td>Condominium</td>
<td>-</td>
</tr>
<tr>
<td>Multi-Family Apartment</td>
<td>-</td>
</tr>
<tr>
<td>Residential (21+ du/ac)</td>
<td>250 gpd/du</td>
</tr>
<tr>
<td>Commercial/Retail/Industrial/Hotel</td>
<td>265 gpd/ksf</td>
</tr>
<tr>
<td>Public/Institutional</td>
<td>-</td>
</tr>
<tr>
<td>Commercial</td>
<td>-</td>
</tr>
<tr>
<td>Industrial - Light</td>
<td>-</td>
</tr>
<tr>
<td>Industrial - Heavy</td>
<td>-</td>
</tr>
<tr>
<td>Institutional</td>
<td>-</td>
</tr>
<tr>
<td>School</td>
<td>-</td>
</tr>
<tr>
<td>Park/Landscape/Irrigation</td>
<td>2,000 gpd/acre</td>
</tr>
<tr>
<td>Parks, Golf Courses, Open Space, Recreation Areas</td>
<td>-</td>
</tr>
<tr>
<td>Open Space, Community Park (Passive) Recreation Facility</td>
<td>-</td>
</tr>
<tr>
<td>Community Park (Active)</td>
<td>-</td>
</tr>
<tr>
<td>Community Facility</td>
<td>-</td>
</tr>
</tbody>
</table>

[2] Table III-1, Ventura County Waterworks District No. 8 Water Master Plan, February 2010.
D. HISTORICAL WATER CONSUMPTION (BASELINE DEMAND CONDITION)

To calculate the future 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. The historical water data was gathered for the past 10-year period. In the previous 2013 to 2016 CWRRs, the City used the most recent 5-year average as the baseline demand condition. However, it was recommended in the 2016 CWRR that the City use the 10-year average in future reports in order to capture pre-drought demands. Thus, the 2017, 2018, and 2019 CWRRs utilize the 10-year average demand. Table 3-5 provides a summary of the City-wide water consumption for each year from 2009 to 2018. The consumption numbers are also depicted graphically on Figure 3-1.

Table 3-5 shows the variability in City-wide water demands. The City experienced a high in 2009 (17,871 AFY) and again in 2012 (18,004) with steady declines to a low in 2017 (13,973 AFY). The average annual water consumption for Years 2009 to 2013 (17,343 AFY) was significantly higher than the average annual consumption for Years 2014 to 2018 (14,727 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 water conservation legislation. The Water Conservation Act of 2009 (Senate Bill 77) requires water suppliers to maintain a reduced urban water use target. This bill, along with the Long-Term Conservation Bills passed in May 2018 (Assembly Bill 1668 and Senate Bill 606), will result in water municipalities maintaining aggressive water conservation programs. In addition, the drop in consumption can be attributed to the City’s request for customers to voluntarily reduce their water usage by 10% in February 2014 and the request for 20% mandatory reduction that has been in place since September 2014.

Over the most recent 5-year period (Years 2014 to 2018), the average annual average water consumption was 14,727 AFY, with the lowest year approximately 5.1% lower than the average and the highest year approximately 15.4% above the average. Over the most recent 10-year period (Years 2009 to 2018), the average annual water consumption was 16,035 AFY, with the lowest year approximately 12.9% lower than the average and the highest year approximately 12.3% above the average. The variability shown in Table 3-5 indicates that some of the water use reduction trends may revert back to previous habits, however some will remain.

Utilizing 10 years of water data will capture the year-to-year variabilities which occur. For the
purposes of establishing a baseline average annual water demand for the existing condition, the 10-year average from the preceding 10 years of water consumption data is used. Therefore, the baseline water demand established for this report is the 10-year average (2009 to 2018) of 16,035 AFY.

Table 3-5

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Consumption [1] (AF)</th>
<th>Averages, AFY [2]</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>17,871</td>
<td>3-year: 17,343</td>
</tr>
<tr>
<td>2010</td>
<td>16,565</td>
<td>5-year: 16,035</td>
</tr>
<tr>
<td>2011</td>
<td>16,550</td>
<td>10-year:</td>
</tr>
<tr>
<td>2012</td>
<td>18,004</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>17,723</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>16,995</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>14,194</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>14,262</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>13,973</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>14,211</td>
<td></td>
</tr>
</tbody>
</table>

[1] Provided by Ventura Water. The CY 2009 to 2017 consumption data included a 6.5% water loss factor. The CY 2018 includes a 5.0% water loss factor based on the preliminary State-required water loss audit. The water loss factor will be updated annually beginning with the 2019 CWRR.

[2] Staff intends to use the 10-year average for baseline demand unless changed circumstances arise. The 3-year and 5-year averages are provided for informational purposes, and are not used in the demand calculation.
E. FUTURE DEMAND PROJECTIONS

This Report projects growth through 2030. The proposed near-term development projects that have been approved by the City but are not yet connected to the City’s water system are used to project water demands for the next 5 years (2023). This includes projects that are currently under construction, or were under construction in December 2018, and projects that have all City approvals, but have yet to begin construction (Table 2-4).

The future average annual water demands for the projects were calculated utilizing the City-specific usage factors listed in Table 3-3. The factors were applied to each project in Table 2-4, per the detailed land use breakdown. As summarized in Table 3-6, the increase in water demand for near-term development projects is estimated to be 1,346 acre-feet/year (AFY). Table 3-6 also identifies the portion of the near-term demands, 582 AFY, that are estimated to be within the service area of the Casitas Municipal Water District.

Adding demands for these near-term development projects to the baseline demand, the total near-term water demands are estimated to be 17,405 AFY, as shown on Table 3-7.

Table 3-6
Total Estimated Demands for Under Construction and Approved Projects
As of December 2018

<table>
<thead>
<tr>
<th>Water Demand Factor Classification</th>
<th>Quantity(^{[1]})</th>
<th>Usage Factor(^{[2]})</th>
<th>Estimated Future Water Demand</th>
<th>Quantity(^{[3]})</th>
<th>Estimated Average Water Demand (within Casitas Boundary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (0-8 du/ac)</td>
<td>661 du</td>
<td>370 gpd/du</td>
<td>244,570 gpd</td>
<td>120 du</td>
<td>44,400 gpd 50 AFY</td>
</tr>
<tr>
<td>Residential (9-20 du/ac)</td>
<td>2,756 du</td>
<td>250 gpd/du</td>
<td>689,000 gpd</td>
<td>1,360 du</td>
<td>340,000 gpd 381 AFY</td>
</tr>
<tr>
<td>Residential (21+ du/ac)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial/Retail/Industrial/Hotel Public/Institutional</td>
<td>491 ksf</td>
<td>265 gpd/ksf</td>
<td>130,188 gpd</td>
<td>36.9 ksf</td>
<td>9,790 gpd 11 AFY</td>
</tr>
<tr>
<td>Park/Landscape/Irrigation</td>
<td>7.97 ac</td>
<td>2,000 gpd/ac</td>
<td>15,940 gpd</td>
<td>3.0 ac</td>
<td>6,000 gpd 7 AFY</td>
</tr>
<tr>
<td>Hospital/Assisted Living</td>
<td>0 bed</td>
<td>545 gpd/bed</td>
<td>0 gpd</td>
<td>0 bed</td>
<td>0 gpd 0 AFY</td>
</tr>
<tr>
<td>PROJ-5810 Ventura Botanical Gardens(^{[3][4]})</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>134 AFY</td>
<td>134 AFY</td>
</tr>
<tr>
<td>PROJ-11236 Mobil Gas(^{[5]})</td>
<td>-</td>
<td>-</td>
<td>2.46 AFY</td>
<td>-</td>
<td>AFY</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,079,698 gpd</strong></td>
<td><strong>1,346 AFY</strong></td>
<td><strong>400,190 gpd</strong></td>
<td><strong>582 AFY</strong></td>
<td></td>
</tr>
</tbody>
</table>

\(^{[1]}\) Per Table 2-4
\(^{[2]}\) Per Table 3-3
\(^{[3]}\) Within Casitas Boundary, per Table 2-4 (included in the total).
\(^{[4]}\) Total Annual Demand Value as reported in the memo Water System Alternatives Evaluation, Water System Hydraulic Evaluation, and Supply Discussion for the Ventura Botanical Gardens in the City of Ventura, dated November 2014
\(^{[5]}\) Total Annual Demand Value as reported in the Water Infrastructure Review – Mobil Gas Station & Carwash, dated September 12, 2014
Table 3-7
Projected Total Water Demands Including Under Construction and Approved Projects – Various Baselines

<table>
<thead>
<tr>
<th>Baseline Demand Condition</th>
<th>Baseline Water Demand</th>
<th>Projected Water Demand [1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Year: 2018</td>
<td>14,211 AFY</td>
<td>15,557 AFY</td>
</tr>
<tr>
<td>3-Year Average: 2016-2018</td>
<td>14,149</td>
<td>15,495</td>
</tr>
<tr>
<td>5-Year Average: 2014-2018</td>
<td>14,727</td>
<td>16,073</td>
</tr>
<tr>
<td><strong>10-Year Average: 2009-2018</strong></td>
<td><strong>16,035</strong></td>
<td><strong>17,381</strong></td>
</tr>
<tr>
<td>Past 5-Year Period: Annual High Year</td>
<td>16,995</td>
<td>18,341</td>
</tr>
<tr>
<td>Past 10-Year Period: Annual High Year</td>
<td>18,004</td>
<td>19,350</td>
</tr>
</tbody>
</table>

[1] Includes an additional near-term demand of 1,346 AFY per Table 3-6.

Note: The previous CWRR's (2013 to 2016) utilized a 5-year average baseline water demand. The 2017, 2018, and 2019 CWRRs utilize a 10-year average baseline water demand.

It is assumed that the approved and under construction projects listed in Table 2-4 will be completed within the next 5 years (2019 to 2023). The total estimated demands associated with the completion of these projects (1,346 AFY per Table 3-6) were applied evenly from 2019 to 2023. In order to project estimated demands from 2024 through 2030, an approximate growth rate of 0.54% (Per City Planning Department based on the Department of Finance historical data for population) was used to estimate the increase in demand from the time all approved projects were fully vested (year 2023) to the Year 2030. The City’s Community Development Department confirmed this growth rate figure is reasonable.
### Table 3-8: Projected Water Demand Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Demand Allocation</th>
<th>Population Growth</th>
<th>Projected Water Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>16,035 AFY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>269.2</td>
<td>269.2</td>
<td>16,304</td>
</tr>
<tr>
<td>2020</td>
<td>269.2</td>
<td>269.2</td>
<td>16,573</td>
</tr>
<tr>
<td>2021</td>
<td>269.2</td>
<td>269.2</td>
<td>16,842</td>
</tr>
<tr>
<td>2022</td>
<td>269.2</td>
<td>269.2</td>
<td>17,112</td>
</tr>
<tr>
<td>2023</td>
<td>269.2</td>
<td>269.2</td>
<td>17,381</td>
</tr>
<tr>
<td>2024</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,475</td>
</tr>
<tr>
<td>2025</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,571</td>
</tr>
<tr>
<td>2026</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,666</td>
</tr>
<tr>
<td>2027</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,763</td>
</tr>
<tr>
<td>2028</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,859</td>
</tr>
<tr>
<td>2029</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,957</td>
</tr>
<tr>
<td>2030</td>
<td>269.2</td>
<td>0.54%</td>
<td>18,055</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td>1,346</td>
</tr>
</tbody>
</table>

[1] Per Table 3-6 - 1,346 AF from approved and under construction projects divided over the next five years.

[2] Per City Planning Department based on the Department of Finance historical data for population.

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

A. INTRODUCTION

The City’s potable water supply is derived from local groundwater basins, Lake Casitas and subsurface water from the Ventura River. The City also has a 10,000 acre-foot per year entitlement from the California State Water Project. To date the City has not received any of this water because there are no existing facilities to get the water directly into the City’s distribution system. However, the City has completed an alignment study and is currently working through the environmental review process for the State Water Interconnection Project proceeding with construction of a pipeline that will enable the City to receive its State Water allocation through a connection to Calleguas Municipal Water District. The pipeline Project is expected to be completed in 2023.

There are presently five local water sources that provide water to the City water system:

- Casitas Municipal Water District (Casitas)
- Ventura River Foster Park Area (Foster Park)
  - Upper Ventura River Groundwater Basin/Subsurface Intake and Wells
- Mound Groundwater Basin (Mound Basin)
- Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)
- Santa Paula Groundwater Basin (Santa Paula Basin)

The City also provides recycled water from the Ventura Water Reclamation Facility (VWRF). The existing six water supply sources and associated supply conditions are discussed in the following sections:

- Normal (non-drought) water supply sources – The City’s water supply in a normal (non-drought) year. The City’s normal water supply portfolio is summarized in Table 4-1.
- Current water supply sources - The City’s water supply under existing conditions (normal, drought, or other emergency conditions) in the current calendar year. The City’s current water supply portfolio is summarized in Table 4-2.
- Projected future water supply sources – The City’s projected water supply through 2030 evaluating both normal and drought conditions. The City’s projected future water supply is summarized in Table 4-3.

Please refer to Figure 4-1 for the locations and boundaries of the City’s supply sources.
Supply Sources

Legend
- City of Ventura Treatment Plant or Conditioning Facility
- Groundwater Basins
- Regional Water District Boundaries

Source: Eagle Aerial, Dec 2007

Figure 4-1
B. NORMAL (NON-DROUGHT) WATER SUPPLY SOURCES

For the purposes of this report, a normal (non-drought) year is defined by the March 2015 Water Shortage Event Contingency Plan (2015 Water Shortage Event Contingency Plan (WSECP)—see Section 5 of this report for further discussion). When the stages of the 2015 WSECP are not activated, the City is experiencing normal conditions. If any stages are activated, the City is considered to be in a water shortage event. Refer to Section 5 for a discussion of water shortage events. The background for the normal (non-drought) water supply portfolio for each source is discussed below and summarized in Table 4-1.

1. Casitas Municipal Water District (Casitas)

The City purchases treated water from Casitas Municipal Water District to provide water supply to a portion of the City. Historically, the City has purchased a third of its water supply from Casitas during “normal” or “non-drought” years. Ventura River diversions and storm water runoff from local watersheds are stored in Lake Casitas, located approximately 10 miles northwest of the City, then treated and delivered to customers by Casitas. Casitas supplies potable water to agricultural, domestic, municipal, and industrial users within its service area. The Casitas service area includes the Ojai Valley, the western part of the City, and the coastal area between the City and Santa Barbara County.

The City’s 1995 water purchase agreement with Casitas required a minimum annual purchase of 6,000 AFY, which was subject to Casitas’ allocation program during drought periods. In May 2017, the City Council approved a new Water Services Agreement between the City and Casitas that establishes that Casitas shall supply the City with sufficient water to meet its in-district projected water demand. The following items summarize major changes and/or new provisions in the Agreement:

- Casitas shall supply the City with sufficient water to meet its Projected Water Demand.
- The City shall submit a Projected Water Demand to Casitas by the last business day of May of every year.
  - The Projected Water Demand is the total amount of water needed to meet the City’s water needs within Casitas boundaries and shall include any adjustments on demand associated with land use.
- In the event that Casitas must enact its Water Efficiency and Allocation Program (WEAP) due to a water shortage, Casitas may adjust the City’s Allocation consistent with the percentage reduction for the WEAP stage.
- The City’s Stage 1 Allocation shall be the average of the City’s Projected Water Demand during the five (5) most recent years during which neither the City nor Casitas are implementing their water shortage contingency plans.
• The City shall annually certify, no later than the last business day of August, whether it achieved Water Balance. The certification shall identify Purchased Water, Actual In-District Demand, and Water Loss.

• The City achieves Water Balance when the below calculation equals a negative number or zero.

• Water Balance = Purchased Water – Actual In-District Demand

• Actual In-District Demand: The water purchased and utilized by the City within Casitas boundaries as certified by the City on an annual basis.
  o Actual In-District Demand = (City Metered Water within Casitas Boundaries) + (Water Loss x Purchased Water)

• Water Loss shall be determined based on the following calculation:
  o Water Loss = (Citywide Water Production – Citywide Metered Sales)/Citywide Water Production
  o The Water Loss calculation will be made each year by the City and may be revised to meet State-prescribed definitions and/or standards.

In order to estimate the normal year supply from Casitas the following assumptions were made:

The amount of City metered water within the Casitas boundaries and purchased water was taken from the past five non-drought fiscal years (FY 09-10 to FY 13-14) certification letters from the City to Casitas. Fiscal Year 09-10 through Fiscal Year 13-14 were considered non-drought years.

The percent used for water loss calculations is 6.5 percent based on the City’s 2010 Urban Water Management Plan. Therefore, the five year average normal (non-drought) water supply from Casitas is estimated to be 5,062 AFY.

To calculate the current (2019) normal water supply from Casitas, the demand from the proposed development projects that are anticipated to be utilizing water by Fiscal Year 2019 are added to the five year average normal (non-drought) water supply from Casitas of 5,062 AFY. Projects completed since fiscal year 2014 and projects expected to be completed within calendar year 2019 are assumed to be utilizing water in Fiscal Year 2019. The normal water supply from Casitas is estimated to be 5,375 AFY and is reflected in Table 4-1.

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

Water from the Ventura River is collected via surface diversion, subsurface collector, and shallow wells and delivered to the Avenue Treatment Plant through the City’s Foster Park facilities. Production from this source is a function of several factors including diversion capacity, local hydrology, environmental impacts, the storage capacity of the Ventura River alluvium, and upstream diversions. Currently, the surface intake structure is unused due to channeling of the active river channel bypassing the structure.
The Foster Park facilities produce groundwater throughout the year. However, due to storm flows, the wells are subject to inundation and erosion. The early 2005 winter storms destroyed Nye Well 1A and damaged Nye Wells 2, 7 and 8. The pipeline between Nye Wells 7 and 8 along the west bank of the river and the pipeline that crosses the river from Nye Well 8 to the intake pipeline for the Avenue Treatment Plant were also damaged during the storms. Nye Wells 7 and 8 were repaired in late 2006; the pipeline across the river was repaired in late 2007, and the pipeline repair between Nye Wells 7 & 8 was completed in early 2009. To date, Nye Well 2 has not been repaired or replaced.

In conjunction with the Matilija Dam Ecosystem Restoration Project, two additional wells, No. 12 and 13, were installed at Foster Park as part of the dam removal mitigation measures. It should be noted these mitigation wells are currently not operational. The mitigation wells were funded by and constructed through a grant received by the Ventura County Watershed Protection District for the City in order to mitigate for water that is expected to be lost as a result of increases in turbidity due to the Matilija Dam removal process. Though these wells have been drilled, they are not connected to the wellfield infrastructure and have not been permitted by the California Department of Public Health as a raw water source for the City’s Avenue Water Treatment Plant. These wells cannot be utilized until the Dam removal process is completed. Additionally, the wells are subject to the Biological Opinion for the Matilija Dam Removal and can only be operated when Ventura River flows are above 15 cubic feet per second (cfs).

The City’s historical production based on the 50-year average production from 1950-2000 was 6,015 AFY. However, current operational constraints allow a diversion efficiency of up to 70 percent (average 4,200 AFY) to be obtained under the City’s operations schedule, which can be considered reliable for planning purposes. Therefore the City’s normal water supply from the Ventura River / Foster Park is 4,200 AFY. Potential reductions to this supply number by proposed regulatory and environmental constraints are discussed in Section 4D.

3. Mound Groundwater Basin (Mound Basin)

The Mound Groundwater Basin has historically provided water for overlying beneficial uses and satisfies agricultural, municipal, and industrial demands. Historical use has been documented to temporarily exceed the yield of the basin and result in water levels that have fallen below sea level and created a threat of seawater intrusion. To abate this threat the City abandoned its historical coastal well facilities and located groundwater extraction near the center of the Mound Basin. A report (Fugro, 1997) compiled as part of a 1996 study of the basin indicated that historical data supports a basin yield of at least 8,000 AFY during drought conditions as long as pumpage is reduced during wet years to allow water levels to recover. The City’s average annual extraction from 2000 to 2009 was approximately 4,000 AFY.
Currently, two City wells withdraw water from the Mound Groundwater Basin; Victoria Well No. 2, which was installed in 1995, and Mound Well No. 1, which began production in April 2003. Victoria Well No. 1, which was installed in 1982, is considered an inactive well at this time due to maintenance and water quality issues. The City recently reached an agreement with the County on deeding to the County its interest in Victoria Well #1 and acquiring land for drilling of Mound Well #2. Construction of Mound Well #3 is currently in progress and is scheduled to be in production in 2020.

Therefore the City’s normal water supply from the Mound Basin is 4,000 AFY.

4. Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)

Wells near the Buenaventura Golf Course pump from the Fox Canyon Aquifer of the Oxnard Plain Groundwater Basin. Currently, three wells, Golf Course Wells No. 5, 6, and 7 produce potable water for the City’s system.

The Fox Canyon Groundwater Management Agency (FCGMA) was created by state legislation in 1982 to manage local groundwater resources in a manner to reduce overdraft of the Oxnard Plain and stop seawater intrusion. A major goal of the FCGMA is to regulate and reduce future extractions of groundwater from the Oxnard Plain aquifers, in order to operate and restore the basin to a safe yield. In August 1990, the FCGMA passed Ordinance No. 5, which required existing groundwater users to reduce their extractions by five percent every five years until a 25 percent reduction was reached by the year 2010.

The City's historical allocation was set by the FCGMA at 5,472 AFY, which was the average extraction from the Golf Course Wells for the base period 1985 to 1989. Beginning in 1992, historical extractions set by the FCGMA were reduced by five percent (5%) to 5,198 AFY, in 1995 it was reduced to 4,925 AFY, in 2000 it was reduced to 4,651 AFY and further reduced in 2010 to the current allocation of 4,100 AFY. Therefore the City’s normal (pre FCGMA Emergency Ordinance E, further discussed in Section C) water supply from the Oxnard Plain Basin is 4,100 AFY.

5. Santa Paula Groundwater Basin (Santa Paula Basin)

The Saticoy Water Company was acquired by the City in 1968, which included Saticoy Well No. 1 that produced water from the Santa Paula Basin. Due to casing failure, the well was destroyed and replaced in 1991 with a new well designated as Saticoy Well No. 2. Well No. 2 was placed in the same general location as Well No. 1. In May 2003, Saticoy Well No. 2 was rehabilitated. After rehabilitation, the resulting sustainable well supply was 1,600 AFY.

In March 1996, the City ended a five-year stalemate over the use of the Santa Paula Basin. Under a court stipulated judgment, the United Water Conservation District (United), the Santa Paula Basin Pumpers Association (an association of ranchers and businesses), and the City all have an interest in
the Santa Paula Basin. The City can pump on average 3,000 AFY from the Santa Paula Basin. The City is not limited to this allocation in any single year, but may produce seven times its average annual allocation (21,000 AF) over any running seven-year period. In addition, under certain circumstances and conditions described in the stipulated judgment, the City may be able to pump an additional 3,000 AFY in case of an emergency, such as a fire, flood, earthquake, or resulting from a long-term drought situation.

Construction of Saticoy Well No. 3 was completed in 2015 and Saticoy Well No. 2 remains active as a back-up well. Prior to 2014, the City acquired 5.8 acre-feet of water rights in the Santa Paula Basin from the past development of Tract 4632. In 2016, the City acquired 35.1 acre-feet of water rights in the Santa Paula Basin from the development of Tracts 5632 and Tract 5774 (see Table 4-1). Therefore, the City’s normal water supply from the Santa Paula Basin is 3,041 AFY.

6. Recycled Water

The City collects and treats wastewater at its Ventura Water Reclamation Facility (VWRF). The reclamation facility capacity is currently permitted for 14MGD; however, the secondary treatment limits the plant capacity to 12 MGD. The reclamation facility is permitted to discharge an annual average of up to 9 MGD. The VWRF discharges less than this during drought conditions. A portion of the tertiary treated effluent is pumped to recycled water customers and the remaining tertiary treated effluent is discharged to the Santa Clara River Estuary (Estuary). The recycled water produced from the VWRF is used for general irrigation of the two golf courses, a City park, and landscape irrigation areas located along the existing distribution alignment. The City’s 2015 Urban Water Management Plan projected that annual recycled water demand would be 700 AFY in 2019.

With continuing drought conditions and shortages in water supply, the City sought to expand the use of recycled water. There was limited use under the City’s current permit originally issued in 1987 by the Los Angeles Regional Water Quality Control Board (LARWQCB) for water reclamation. Therefore, the City was directed by the LARWQCB and the State Water Resources Control Board (SWRCB) to submit a Change Petition to add dust control and residential irrigation use as permitted uses as well as account for reduced discharges of treated wastewater to the Santa Clara River Estuary. The City filed a Wastewater Change Petition with the SWRCB Division of Water Rights on April 17, 2015.

A mobile Reuse Program was created and submitted to the LARWQCB and the SWRCB Division of Drinking Water for approval on August 19, 2015. The City was given permission by LARWQCB to begin hauling recycled water from the VWRF to use on City trees, but not for use by residents and the other designated non-residential customers until the Change Petition and CEQA process was completed. Approval for the Wastewater Change Petition WW0083 was given on May 6, 2016. It increased the amount of available recycled water use from 0.67 MGD to 2.0 MGD. The approved
uses for recycled water were for landscape irrigation and dust control at locations specified in the petition and CEQA Initial Study and Negative Declaration document. In CY 2018, approximately 14.52 acre-feet of recycled water was served from the Recycled Water Fill Station. The demand from the Mobile Reuse Program is not included in Table 4-1.

The City’s normal water supply portfolio is summarized in Table 4-1.

Table 4-1
Summary of Normal Water Supply 2019*

<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>Normal Supply AFY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Municipal Water District [1]</td>
<td>5,375</td>
</tr>
<tr>
<td>Ventura River / Foster Park</td>
<td>4,200</td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>4,000</td>
</tr>
<tr>
<td>Oxnard Plain Groundwater Basin</td>
<td>4,100</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin [2]</td>
<td>3,000</td>
</tr>
<tr>
<td>City Acquired Water Rights [3]</td>
<td>40.9</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>21,415 AF</strong></td>
</tr>
</tbody>
</table>

[1] Demand within Casitas service area is based on the 2017 Agreement. The five year average normal (non-drought) water supply from Casitas is estimated to be 5,062 AFY. Adding in development since 2014 (estimated to be 256 AFY) brings the total normal year supply to 5,375 AFY.

[2] Includes 3,000 AF of original City allocation and


*Table 4-1 per the 2015 WSECP was previously identified as Summary of Current Water Supply.
C. CURRENT WATER SUPPLY SOURCES (2019)

For the purposes of this report, the City’s current water supply sources is defined as the City’s water supply under existing conditions (normal, drought, or other emergency conditions) in the current calendar year. A definition of drought is provided in Section 5. The current water supply sources under existing conditions in calendar year 2019 will be evaluated for drought impact. The background for the current water supply portfolio for each source is discussed below and summarized in Table 4-2.

1. Casitas Municipal Water District (Casitas)

As mentioned in the Normal Water Supply section, a Water Services Agreement between the City and Casitas was finalized and approved by City Council in May 2017. The agreement indicates that in the event that Casitas must enact its Water Efficiency and Allocation Program (2015 WEAP) due to a water shortage, Casitas may adjust the City’s allocation consistent with the percentage reduction for the WEAP stage.

Casitas has assigned five stages of water storage in Lake Casitas that serve as a guidance to triggering the implementation of water use reduction goals and measures.

Table 3 – Stage Conditions from Casitas Municipal Water District’s “Water Efficiency and Allocation Program” dated May 9, 2018

<table>
<thead>
<tr>
<th>Stage</th>
<th>Stage Title</th>
<th>Lake Casitas Storage (%)</th>
<th>Demand Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water Conservation</td>
<td>100% to 50%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>Water Shortage Warning</td>
<td>50% to 40%</td>
<td>20%</td>
</tr>
<tr>
<td>3</td>
<td>Water Shortage Eminent</td>
<td>40% to 30%</td>
<td>30%</td>
</tr>
<tr>
<td>4</td>
<td>Severe Water Shortage</td>
<td>30% to 25%</td>
<td>40%</td>
</tr>
<tr>
<td>5</td>
<td>Critical Water Shortage</td>
<td>25% to 0%</td>
<td>50%</td>
</tr>
</tbody>
</table>

The Casitas General Manager shall report to the Casitas Board of Directors each year with an assessment of the current water storage in Lake Casitas and local groundwater basins, current water use trends, predicted weather conditions, and an evaluation of current water use reduction goals. The report may be delivered in April or as Lake Casitas storage reaches a change in Stage action level. The Casitas Board of Directors may, at their sole discretion, declare that a Stage condition of water supply in Lake Casitas exists and implement the appropriate demand reduction goals and measures in response to current and/or predicted water availability conditions.

As of March 2019, Casitas is currently in a Stage 3 water supply condition per Casitas Resolution No. 16-00. The current lake level as of March 14, 2019 was 43 percent full. The Casitas Board of Directors may not make a final decision on the Stage condition until April or May 2019. As of April 10,
the Board of Directors has not made a decision on whether to change the stage condition for Fiscal Year 2019-2020, but CMWD staff has indicated that it is unlikely that the Board will declare a Stage 2 water supply condition. In order to be conservative, the 2019 CWRR assumes that Casitas will remain in a Stage 3 Drought condition, and imposes a reduction of 30% to the City’s Casitas supply consistent with the Stage 3 mandates.

The Water Services Agreement between Casitas and the City specifies that the City’s Stage 1 Allocation shall be the average of the City’s Projected Water Demand during the five (5) most recent years during which neither the City nor Casitas are implementing their water shortage contingency plans. The projected water demand from the past five non-drought fiscal years (FY 09-10 to FY 13-14) certification letters from the City to Casitas including demand associated with land use change is 5,375 AFY. A Stage 3 demand reduction of 30% would result in a supply of 3,763 AFY.

Therefore, the City’s current water supply from Casitas is 3,763 AFY for calendar year 2019.

2. Ventura River Surface Water Intake and Upper Ventura River Groundwater Basin/Subsurface Intake and Wells (Foster Park)
Due to continued drought conditions and heightened environmental requirements, the City’s ability to draw water from the Ventura River continues to be significantly challenged and impacted. To determine the City’s current water supply with the existing drought conditions, the five-year production average from 2014 to 2018 was selected. This date range was selected since it reflects current drought conditions. Therefore, the City’s current water supply from Ventura River / Foster Park is 2,323 AFY for calendar year 2019.

3. Mound Groundwater Basin (Mound Basin)
Due to operational constraints, production from the Mound Basin has been lower than the historical 10-year average discussed in the Normal Water Supply section. To determine the City’s current water supply, the two year production average from 2017 to 2018 was selected. This date range was selected since it reflects recent operational constraints due to the current condition of the City’s existing wells in this basin.

Therefore, the City’s current water supply from the Mound Basin is 1,963 AFY for calendar year 2019. The City is currently designing/constructing Mound Wells 2 and 3. Once these wells are completed, production from the Mound Basin can increase.

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.

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 has been 3,862 AFY since January 1, 2016. This equates to a reduction of approximately 29% from the previous historical baseline allocation of 5,472 AFY. The City’s allocation has been limited to 3,862 AFY.

The City may 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. 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:
  o The FCGMA Act goal of safe yield by 2010 not being met,
  o The 2007 Groundwater Management Plan Basin Management Objectives not being met,
  o Water level declines in all basins,
  o The unsustainability of the current Agency allocation scheme,
  o Increase in time of planted acres of water intensive crops, and
  o The continued unabated threats to the resource (seawater intrusion, water quality degradation, land subsidence).

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. Therefore, the City’s current water supply from the Oxnard Plain is 3,862 AFY for calendar year 2019.

5. Santa Paula Groundwater Basin (Santa Paula Basin)
As discussed in the Normal Water Supply section above, the Santa Paula Basin Judgment allows the City to utilize 3,000 AFY. No reductions to this supply is anticipated for this year; therefore, the City’s current water supply from the Santa Paula Basin is 3,041 AFY (includes City acquired water rights) for calendar year 2019.

6. Recycled Water
As stated in the 2015 Urban Water Management Plan, the City’s projected annual recycled water
demand for 2019 is approximately 700 AFY. Therefore, the City’s current recycled water demand is 700 AFY for calendar year 2019.

The City’s current water supply portfolio is summarized below in Table 4-2.

### Table 4-2
**Summary of Current Water Supply 2019**

<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>Current Supply 2019 AFY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Municipal Water District [1]</td>
<td>3,763</td>
</tr>
<tr>
<td>Ventura River / Foster Park</td>
<td>2,323</td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>1,963</td>
</tr>
<tr>
<td>Oxnard Plain Groundwater Basin</td>
<td>3,862</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin [2]</td>
<td>3,000</td>
</tr>
<tr>
<td>City Acquired Water Rights [3]</td>
<td>40.9</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15,651</strong></td>
</tr>
</tbody>
</table>

[1] Demand within Casitas service area is based on the 2017 Agreement and assumes a Stage 3 demand reduction.
[2] Includes 3,000 AF of original City allocation and

In June 2018, the City Council confirmed that the City remains in a Stage 3 Water Shortage Event. Although the City recognizes that our region has received a significant amount of rainfall this winter, the above evaluation of current conditions of each water supply source along with the triggers outlined in the Water Shortage Event Contingency Plan (WSECP) indicates that the City remains in a water shortage event following consecutive years of drought. **Water shortage events and a definition of drought are provided in Section 5 of this report.** The 2015 WSECP includes stages of action to respond to water shortage events. The City developed a six-stage contingency plan to reduce demand up to 60% during a severe or extended water shortage event including both voluntary and mandatory stages. In September 2014, the City Council declared that Ventura was in a Stage 3 Water Shortage Emergency calling for 20% mandatory conservation cutback. The Stage 3 trigger indicates that annual supply projection is between 20% and 29% below normal year supply projection. The annual supply projection is from the current supply from Table 4-2 above and the normal year supply is identified from Table 4-1 of the 2013 CWRR. The WSECP noted that the
baseline supply value will not change through the duration of the event. The City has remained in the current drought/shortage condition since 2014, so Table 4-1 of the 2013 CWRR is utilized for the baseline supply value.

The annual supply projection from Table 4-2 of this report for 2019 supply drought/shortage impact is 15,651 AFY. The normal year supply projection from Table 4-1 of the 2013 CWRR is 19,600 AFY. Therefore, the annual supply projection is 20.15% below normal year supply and the City remains in a Stage 3 Water Shortage Event.

D. PROJECTED FUTURE WATER SUPPLY

The City’s projected future water supply sources is evaluated through 2030 and assesses the current drought and forecasts an additional two years of drought through 2021 (for a total duration of a ten year drought). The projected future water supply also assumes that the City will revert to normal conditions in 2025 through 2030. The background for the City’s projected future water supply portfolio for each source is discussed below and summarized in Table 4-3.

The City’s projected future water supply will be impacted by the Sustainable Groundwater Management Act (SGMA). In September 2014, the State legislature passed the SGMA to improve management of groundwater resources in California. Groundwater Sustainability Agencies (GSAs) must be formed for regions where groundwater basins are designated medium or high priority by the Department of Water Resources (DWR). Medium or high priority ranking groundwater basins are at risk of overdraft and/or a decline in water quality. The intent of the legislation is to manage groundwater sustainably; to require reporting related to hydrogeological conditions, water balance trends, sustainable yield and beneficial uses; to prevent the deterioration of water quality and environmental damage and irreversible land subsidence; and to increase groundwater recharge and storage; amongst additional guidelines. SGMA also provides the GSA with a range of authorities including but not limited to adopting rules, regulations, ordinances, and resolutions to implement SGMA; monitoring compliance and enforcement; requiring registration of groundwater extraction wells; investigating, appropriating, and acquiring surface water rights, groundwater, and groundwater rights into the GSA; acquiring or augmenting local water supplies to enhance the sustainability of the groundwater basin; and adopting and funding a Groundwater Sustainability Plan (GSP).

GSAs have been formed for the Upper Ventura River and Mound Basins. The Fox Canyon Groundwater Management Agency (FCGMA) was named as the GSA for the Oxnard Plain Basin (designated as high-priority) and the City is participating in the development of the GSP for the Oxnard Plain Basin. The Santa Paula Basin is managed under a stipulated judgement, and is currently only subject to annual reporting requirements to DWR under SGMA. The SGMA’s impact on the City’s water supply sources is further discussed in the respective sections below.
1. Casitas Municipal Water District (Casitas)

As mentioned in the Normal Water Supply section, a Water Services Agreement between the City and Casitas was finalized and approved by City Council in May 2017. The agreement indicates that in the event that Casitas must enact its Water Efficiency and Allocation Program (WEAP) due to a water shortage, Casitas may adjust the City’s allocation consistent with the percentage reduction for the WEAP stage.

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 582 AFY. Therefore, the anticipated future water supply from Casitas will increase by an equivalent amount, to approximately 5,491 AFY by Year 2020. Using the growth rate discussed in Section 3 and factoring in completed projects since 2014 the estimated supply from Casitas is estimated to increase by 313 AFY in year 2019. However, this supply increase is subject to a percentage reduction consistent with the WEAP stage if Casitas has declared a water shortage.

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. In March 2017, the storage in Lake Casitas was at 43.9% of capacity. In December 2018, Lake Casitas was at 30.5% capacity. Following a wet winter, Lake Casitas is currently at 43% capacity.

Casitas is currently in a Stage 3 water supply condition per Casitas Resolution No. 16-09. Although the Lake is currently slightly above 40% capacity, it is likely that Casitas will remain in a Stage 3 water supply condition. In order to be conservative, this report assumes a reduction of 30% to the City’s Casitas supply for the 2019 and 2020 Supply Drought Impact and a 40% reduction for 2021.

Therefore, the City’s projected supply from Casitas for 2020 is 3,844 AFY (30% reduction) and 3,365 AFY in 2021 (40% reduction). The Casitas projected supply in 2025 and 2030 includes growth projections within Casitas’ boundaries. Therefore, the City’s projected supply from Casitas is 5,904 AFY for 2025 and 6,067 AFY for 2030.

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

Due to the continued drought conditions and heightened environmental requirements, the City’s ability to draw water from the Ventura River continues to be significantly challenged and impacted. If the current drought continues through 2021, the supplies will be further impacted. Ventura Water staff is evaluating a multi-year drought based on City Council recommendation. To determine the 2020 and 2021 supply drought impact, the average of the two most recent driest years (2015 and 2016) was used for the projections. Therefore, the projected future water supply for 2020 and 2021 from the
Ventura River / Foster Park is 1,573 AFY.

As discussed above in the Normal (non-drought) Water Supply section, production wells at Foster Park were destroyed during 2001 and 2005 storm events. These events have reduced the City's ability to extract water from Foster Park. The 2018 Capital Improvement Program includes the Foster Park Wellfield Production Restoration project. The project involves the replacement of the destroyed wells and construction of new facilities to restore historical production capabilities of 6,700 AFY. The project is scheduled to be completed by 2025. A range of conditions was used to estimate 2025 and 2030 projected future water supply, which assumes normal conditions. The low end equals the City's highest production value for the past 10 years (2008-2009 to 2017-2018), and the high end equals the expected production from the completed Foster Park Wellfield Production Restoration project in a wet year. Therefore, the projected future water supply for 2025 and 2030 from the Ventura River / Foster Park is 3,647 – 6,700 AFY.

Studies being conducted by the State Water Resources Control Board (SWRCB) and the California Department of Fish and Wildlife (CDFW), and the Groundwater Sustainability Plan for the Upper Ventura River Groundwater Basin, and pending litigation may impact the amount and/or timing of water the City is able to utilize from the Upper Ventura River watershed.

The Ventura River was identified as one of five priority stream systems in the California Water Action Plan (WAP) adopted in January 2014 by Governor Edmund G. Brown Jr. Action four of the WAP, to “Protect and Restore Important Ecosystems”, contains a sub-action that states the following:

The State Water Resources Control Board and the Department of Fish and Wildlife will implement a suite of individual and coordinated administrative efforts to enhance flows statewide in at least five stream systems that support critical habitat for anadromous fish. These actions include developing defensible, cost-effective, and time-sensitive approaches to establish instream flows using sound science and a transparent public process. When developing and implementing this action, the State Water Resources Control Board and the Department of Fish and Wildlife will consider their public trust responsibility and existing statutory authorities such as maintaining fish in good condition.

The SWRCB and California Department of Fish & Wildlife (CDFW) are currently working to identify potential actions that may be taken to enhance and establish instream flow for anadromous fish in the Ventura River watershed (and the other four priority watersheds). The SWRCB is developing an integrated groundwater – surface water model to provide a better understanding of water supply, water demand, and instream flow needs in the Ventura River watershed. CDFW is developing streamflow versus habitat relationships in the mainstem Ventura River, and San Antonio Creek, a primary tributary. According to these agencies, this information will be used to enhance flows in the watershed in several ways, including the development of flow criteria and identification of important flow thresholds for conservation, restoration, and protection of southern steelhead in the Ventura River
watershed.

The Upper Ventura River Groundwater Basin is designated medium-priority by DWR and the Upper Ventura River Groundwater Agency (UVRGA) has been identified as the GSA for the basin. The UVRGA was formed through a Joint Exercise of Powers Agreement (JPA) by and among Ventura River Water District, Meiners Oaks Water District, Casitas Municipal Water District, Ventura County Watershed Protection District (VCWPD), and the City. The major components of the JPA include authority, power, membership, directors, voting paradigms and financing. These items were negotiated with the assistance of the Center for Collaborative Policy and included three stakeholder meetings. In addition to representatives from each of the five member agencies, the Board of Directors includes an agricultural stakeholder director and environmental stakeholder director.

Additional information, meeting notices, and agendas are available here:  http://www.uvrgroundwater.org. The UVRGA has submitted its intent to DWR to begin to development its GSP by January 1, 2022 and DWR expects this basin to reach sustainability by January 1, 2042.

In September 2014, Santa Barbara Channelkeeper filed a lawsuit against the State Water Resources Control Board (SWRCB) and the City, alleging that the City had been over-pumping water from the Ventura River. In September 2018, the City filed an amended cross-complaint bringing into the litigation all water users in the Ventura River watershed to ensure that all parties are at the table and involved in developing solutions. While the lawsuit is still pending, the City’s goal is to resolve the litigation by developing a long-term solution with local water interests to protect the watershed and those who depend on it in a comprehensive and enforceable way. This is an on-going process.

3. Mound Groundwater Basin (Mound Basin)

The City anticipates completing a study within the next year to review the perennial yield of the Mound Basin and determine if the annual average yield of the basin is still believed to be accurate.

According to the adopted 2016-2022 Capital Improvement Program, Mound Wells 2 and 3 are anticipated to come online within the next few years. Mound Well 3 is scheduled to be operational in Spring of 2020 and Mound Well 2 is anticipated to be operational in 2021. Thus, the projected water supply from the Mound Basin for the future is greater than the current 2019 supply of 1,963 AFY (discussed in the Current Supply section above). Although 2020 and 2021 future projections are evaluated under drought impact, the addition of Mound Wells 2 and 3 will help alleviate current operational constraints. Since Mound 3 is expected be operational in 2020, the 10-year average (2000 to 2009) was used to calculate the 2020 and 2021 supply numbers. Therefore, the projected future water supply for 2020 and 2021 from the Mound Basin is 4,000 AFY. To calculate the 2025 and 2030 supply numbers, the 10 year average (2000 to 2009) from the Mound Basis was also used. Therefore,
the projected future water supply from the Mound Basin for 2025 to 2030 is 4,000 AFY.

The Mound Basin is designated medium-priority by DWR and the Mound Basin Groundwater Sustainability Agency (MBGSA) has been recognized by DWR as the GSA for the basin. The MBGSA was formed through a Joint Exercise of Powers Agreement (JPA) by and among the United Water Conservation District (UWCD), the City, and the County of Ventura. In addition to representatives from each of the 3 member agencies, the Board of Directors includes an agricultural stakeholder director and environmental stakeholder director. Meeting notices, and agendas are available here: https://www.cityofventura.ca.gov/1180/Mound-Basin-GSA.

4. Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)

As discussed in the Current Water Supply section, FCGMA’s Emergency Ordinance E currently dictates the City’s groundwater allocation in the Oxnard Plain. The City’s Temporary Extraction Allocation (TEA) was set at 4,827 on July 1, 2014. However, the ordinance also established phased reductions to the TEA. As of January 1, 2016, a 20% total reduction of the TEA is in effect. The City’s allocation is 3,862 AFY until further action is taken by the FCGMA.

Therefore, the projected future supply from the Oxnard Plain Basin for 2020, 2021, 2025, and 2030 is 3,862 AFY.

**FCGMA and SGMA**

The Oxnard Plain Basin is designated as a high priority basin by DWR. The Fox Canyon Groundwater Management Agency (FCGMA) was named as the GSA for the Oxnard Plain Basin (designated as high-priority). FCGMA released a preliminary draft GSP for the Oxnard Plain Basin for public comment in December 2017. The Board is scheduled to release a revised draft of the Oxnard Plain Basin GSP for public review in late May 2019. A final GSP must be adopted by the Board before January 2020. The FCGMA Board is considering replacing Emergency Ordinance E with a revised allocation plan before completion of the GSP. However, this allocation plan is not likely to significantly affect the City’s allocation in 2019.

5. Santa Paula Groundwater Basin (Santa Paula Basin)

As discussed in the Normal Water Supply section, the Santa Paula Basin is subject to a stipulated judgment and is managed by the Santa Paula Basin Technical Advisory Committee (TAC) with equal representation from United Water Conservation District (UWCD), the Santa Paula Basin Pumpers Association (SPBPA), and the City. The TAC is charged with establishing a program to “monitor conditions in the basin, including but not necessarily limited to verification of future pumping amounts, measurements of groundwater levels, estimates of inflow to and outflow from the basin, increases and decreases in groundwater storage, and analyses of groundwater quality.” The Judgment also allows for the development of a management plan for the operation of the basin and empowers the TAC to
determine the safe yield of the basin.

In 2014, UWCD commissioned the Santa Paula Basin Hydrogeological Characterization and Safe Yield Study. Comment letters were provided by the SPBPA and the City on two drafts of the study. In 2017, the report was finalized and concluded that the safe-yield of the Santa Paula Basin was in the range from 24,000 to 25,500 AFY (for the 1999 to 2012 base period). When it was submitted to the Court, it included the following commentary: "The TAC does not perceive potential adverse impacts to the Basin as an immediate concern for several reasons. First, pumping levels have been steady at an extraction rate of approximately 25,500 AFY for many years and there is no evidence that cumulative production from the Basin will expand substantially in the near future. Second, the TAC members, in coordination with other Basin stakeholders, are pursuing opportunities for yield enhancement as discussed in the Projects Study. Finally, the TAC has also formed a technical work group to identify specific Basin conditions (e.g., water levels in key monitoring wells), which if observed (i.e., "triggered") would cause the TAC to recommend reductions in allowed pumping to ensure that the health of the Basin is not degraded."

If basin conditions change, then the City may have reductions in pumping allocations. Stage 2 reduces the City’s pumping to 1,141 AFY, Stage 3 reduces the City’s pumping allocations to 641 AFY, Stage 4 reduces the City’s pumping allocations to 481 AFY and Stage 5 reduces the City’s allocations to zero. Currently, the TAC is working on various basin management measures, including potential triggers for the above stages and potential projects to enhance the sustainable yield of the basin.

Based on recent work completed by the technical working group regarding conditions in the Basin, it is projected that no Stage reductions will be implemented even if the drought remains in effect through 2021. It is also projected that under normal conditions in 2025 to 2030, that the allocation will remain at 3,000 AFY. Additional water rights of 40.9 AF total were acquired for the past development of Tract 4632 (5.8 AF) and development of Phase I of Tract 5632 (12 AF) and Tract 5774 (23.1 AF).

Therefore, the projected future water supply in 2020, 2021, 2025 and 2030 is 3,000 AFY for the original City allocation and 40.9 AFY for City acquired water rights.

**Santa Paula Basin and SGMA**

The Santa Paula Basin is largely exempt from SGMA because a stipulated judgment among three parties, including the City, already manages it. The Santa Paula Basin is considered adjudicated, which means that groundwater allocations and extraction rights are already determined.

### 6. Recycled Water

The estimated anticipated future water supply for recycled water is based on the 2015 Urban Water Management Plan projections for recycled water.

### 7. VenturaWaterPure
The City’s Ventura Water Reclamation Facility (VWRF) treats the wastewater generated by the City’s 30,000 homes and businesses to stringent standards before releasing the tertiary treated effluent to the Santa Clara River Estuary (SCRE) with approximately 700 acre-feet per year (AFY) diverted as recycled water for landscape irrigation by several users. This water is regulated with a permit issued by the Los Angeles Regional Water Quality Control Board (RWQCB or Regional Board), which is renewed every five years.

In 2015, the City initiated a pilot project to test the feasibility of constructing an advanced water purification facility (AWPF) to maximize quantity and reliability of potable supplies by purifying tertiary treated effluent produced by the VWRF and optimizing its potable reuse, rather than discharging into the SCRE. The pilot facility operated for 9 months and produced favorable results, indicating highly reliable purification technologies, providing information on relatively steady and controlled operational needs and costs, and the absence of risk to public health and safety. As a result, the City is proposing to construct a full-scale AWPF.

The City of Ventura is currently in the planning phases for the proposed VenturaWaterPure Project which includes additional diversion of tertiary treated effluent to a new proposed Advanced Water Purification Facility (AWPF) for potable reuse. Potable reuse is the proven use of recycled water to supplement drinking water supplies. After years of special studies, environmental assessment, demonstration facility testing, and stakeholder meetings, the City determined the best way to enhance environmental protection while improving local water quality and supply reliability is to divert highly treated wastewater discharges for reuse. The final product of this state-of-the-art AWPF would be a new, locally owned source of highly purified drinking water that provides Ventura with a long-term drought resilient water supply solution. On March 6, 2019, the City released the Ventura Water Supply Projects Draft Environmental Impact Report for public review and written comment. Upon completion of the environmental review process, the next steps include permitting, final design, and bidding for construction.

One objective of the VenturaWaterPure Project is to protect the ecology of the SCRE. The City is party to a Consent Decree (The Tertiary Treated Flows Consent Decree and Stipulated Dismissal with the Wishtoyo Foundation Ventura Coastkeeper, Heal the Bay filed with the U.S. Central California District Court February 3, 2012, executed among the City, the Wishtoyo Foundation/Ventura Coastkeeper, and Heal the Bay) for the protection of the SCRE. The Consent Decree expresses the City’s commitment to pursue “environmentally protective, sustainable, and integrated water supply and wastewater discharge practices. . . [including] infrastructure options for Ventura’s reclamation and diversion of an ecologically appropriate volume” of tertiary-treated flows produced by the existing VWRF and currently discharged to the SCRE. The Consent Decree requires such diverted flows to be dedicated to “water reclamation uses,” including local water supply augmentation to the maximum extent feasible.
The City has conducted extensive analysis of the SCRE, including estimated ecological effects of reduced discharges on the SCRE. This analysis is compiled in several reports and reviews mandated by the Consent Decree, including the Phase 1, 2, and 3 Studies, the Technical Review Team (TRT) Report, the Scientific Review Panel (SRP) Final Report, and the TRT review supporting the conclusions and recommendations in the SRP Final Report. The findings of the reports and reviews are discussed in detail in Section 1.6 of the Draft EIR and the analysis was used to support a proposed diversion volume and continued discharge level. The SRP Final Report (supported by the TRT Review) recommends a Continued Discharge Level (CDL) range of 0 – 0.5 MGD (on an average annual basis) during closed berm conditions. This conclusion was founded on the beneficial effects of discharge reduction to ecological conditions.

Since the publication of the SRP Final Report, the City has met with and received feedback on the proposed projects from state and federal wildlife agencies. Based on the scientific record and feedback from the agencies, the City is proposing additional phasing to the implementation approach that would commit to a CDL of 1.9 MGD by the end of year 2025, with a planned reduction to a CDL of 0 to 0.5 MGD during closed berm conditions by the end of year 2030. This phased implementation approach is the basis of the proposed project’s designed flow rate and minimum treatment capacity. The proposed timeline for the completion of the VenturaWaterPure Project is illustrated in Figure 4-2.

**Figure 4-2**

Based on the completion of the Special Studies and additional assessments detailed in the Draft EIR, the future water supply provided by the VenturaWaterPure Project is projected to be 2,800 AFY in 2025 and 2,800 AFY to 4,000 AFY in 2030.

9. State Water Project

The City has a 10,000 acre-foot per year entitlement from the California State Water Project (SWP). The base contractual agreements concerning the City’s annual entitlement to 10,000 acre-feet of SWP are: (1) the 1963 State Water Supply Contract of 20,000 acre-feet entitlement of SWP water between the Department of Water Resources (DWR) and Ventura County Watershed Protection District (VCWPD) known formerly as Ventura County Flood Control District (VCFCDD); (2) the 1970 agreement
between VCFCD and Casitas known formerly as the Ventura Municipal Water District that assigned the 20,000 acre-feet entitlement to Casitas; and (3) the 1971 agreements between Casitas and the City providing the City with an annual entitlement of 10,000 acre-feet and Casitas and United providing United with an annual entitlement of 5,000 acre-feet.

In the contract with Casitas, the City retains full authority and responsibility for determining the point and method of delivery of the allocation. To date, the City has not constructed the improvements necessary to receive direct delivery of its allocation.

The City pays annual SWP Table A water fees to DWR, which cover construction costs for SWP facilities and administration to deliver allotments of water throughout the state. In addition, the citizens of Ventura participated in an advisory vote on November 3, 1992 and selected desalinating seawater over importing water through the SWP, as the preferred supplemental water supply option. However, based on the City Attorney Office's review of the City's SWP Table A water, the City cannot unilaterally end its involvement in the SWP's financial obligations and SWP Table A water without great risk.

The Monterey Amendment to the State Water Contract in 1999 provided the City a formal mechanism to allow the City to place their SWP water into a “turn back” pool to be purchased by other SWP contractors. The City has taken part in the SWP “turn back” pool over the past several years which has provided a small annual revenue offset. The City has also worked recently with United who requested to receive the City’s allocation at the “turn back” pool rate which provided water benefits to the County area as a whole.

On January 23, 2017, City Council authorized an alignment study by Kennedy/Jenks to determine how the interconnection project can be designed and operated to supply water to serve the regional needs of the City, Calleguas, Casitas Municipal Water District (Casitas), and United Water Conservation District (United). The final alignment study was completed in 2018, and the environmental review process pursuant to CEQA has commenced.

On February 28, 2018, the City issued the Notice of Preparation of a Draft Environmental Impact Report (EIR) for the State Water Interconnection Project (NOP). A Draft EIR was prepared to evaluate the potential environmental impacts associated with construction and operation of the Interconnection Pipeline and associated facilities. The Draft EIR has been completed and was circulated for a 45-day public review period on February 19, 2019. As stated in the Draft EIR, the project will enable delivery of SWP water by wheeling through Metropolitan Water District of Southern California and Calleguas to the City. The connection will also facilitate direct delivery of SWP water to United and direct or in-lieu delivery of SWP water to Casitas. In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of its imported water supplies. The interconnection will be a pipeline used to transport water between Calleguas’ and the City’s distribution systems. The pipeline will be
approximately 7 miles in length originating in the south-eastern portion of the City, traversing southerly and easterly through unincorporated Ventura County, to the southwestern end of the City of Camarillo.

As stated in the Draft EIR, “The proposed State Water Interconnection Project is not anticipated to provide any increased water supply volume for the City. However, the project would improve system reliability by providing access to a replacement supply source for the water supplies that have been reduced or have otherwise become less available. It also could meet a necessary requirement for the VenturaWaterPure Project, since the City may need to demonstrate an available backup supply in order to receive certain State approvals. Additionally, SWP water is a near-term option for providing the necessary water to dilute high TDS levels in groundwater to improve system water quality.”

Benefits to the City include making up for losses in annual yield from existing supply sources (Lake Casitas, Ventura River, and groundwater), improving water quality, and providing an emergency/backup supply for Ventura Water’s proposed potable reuse project, VenturaWaterPure. These operational details will be developed through the project design and planning process and negotiations with project partners. These details will be reflected in future CWRRs when available.

While the City’s water supply contract for SWP water provides the City with a maximum annual allocation of 10,000 AF, the actual allocation of available water is set by California Department of Water Resources (DWR) annually. DWR allocations are finalized in the Spring of each year and consider the following:

- hydrologic conditions
- existing storage in reservoirs
- operational and regulatory constraints
- contractor demands

Based on historical allocations the range of available SWP water has been 5% to 100% over the last 25 years. However, the running average continues to decline. Given the uncertainty of SWP deliveries and the fact that capacity in MWD and Calleguas’ systems must be available in order for water to be wheeled to the City, a range of zero to full allocation of the City’s entitlement was selected for 2025 and 2030 projected supplies. Therefore, the projected available water supply in 2025 and 2030 for SWP water delivered by the State Water Interconnection Project is estimated to be 0-10,000 AFY.

The City’s projected future water supply portfolio is summarized in Table 4-3.
### Table 4-3: Summary of Projected Future Water Supply from Existing and Potential New Sources

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxnard Plain Groundwater Basin [10]</td>
<td>4,100</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Original City Allocation [11]</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>2,800</td>
<td>2,800-4,000</td>
</tr>
<tr>
<td>VenturaWaterPure</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,800</td>
<td>2,800-4,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>21,415</td>
<td>15,651</td>
<td>17,020</td>
<td>16,541</td>
<td>23,954-27,007</td>
<td>24,282-28,535</td>
</tr>
<tr>
<td>State Water [14]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0-10,000</td>
<td>0-10,000</td>
</tr>
</tbody>
</table>

Note: Projected supply values do not take into account water quality for all sources or account for loss of one source.

[1] None of these numbers preclude the City’s water rights.
[2] 30% drought impact based on 2017 agreement with casitas
[3] Projects that Casitas will declare Stage 4 (40% reduction) if the drought continues to 2021.
[4] Casitas future supply is adjusted as demand increases within the Casitas service area based on the absorption rate in Table 3-8.
[7] Based on the highest City production value in the past 10 years (2008-2017) and the intent of the City to restore production to the historical levels by 2025.
[10] 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.
[11] The Santa Paula Basin Judgment allows the City to utilize on average 3,000 AF annually.
[12] Water rights acquired for the past development of Tract 4632 and development of Phase 1 of Tract 5632 and Tract 5774.
[14] Low range reflects potential limitations in wheeled capacity and uncertainty of SWP deliveries. High range assumes full allocation of the City’s 10,000 AF per year entitlement. The average allocation from 2013-2018 was 39%.
E. POTENTIAL ADDITIONAL FUTURE SUPPLY SOURCES

This section will briefly describe any additional planned or proposed projects which may affect the water supply sources for the City.

1. Ocean Desalination

In 2013, City staff was engaged in discussions with local water agencies in regard to potential regional desalination projects. In the City’s 2015 UWMP, seawater desalination was included as a potential future part of the City’s long term water supply portfolio and as an additional emergency water supply during times of drought. The desalination facility would be designed with a delivery capacity of up to 2.7 million gallons per day or 3,000 AFY. In 2016, as part of the development of the Water Rights Dedication and Water Resource Net Zero Fee Ordinance and Resolution (see Chapter Section 5 Programs and Policies), the “Evaluation of a Water Resource Net Zero Fee Report” was prepared dated May 11, 2016 by Water Consultancy. The report describes potential additional water supplies identified in the City’s Capital Improvement Program (CIP). At this time, Project 74070 Advanced Wastewater Treatment Plant Land Acquisition is listed in the City’s Adopted 2016-2022 CIP. The land acquisition is for the expansion of the City’s water supply for the construction of potential advanced water purification facilities for potable reuse and/or desalination. The project’s time schedule includes planning from 2016 through 2019.

According to the Draft Ventura Water Supply Projects Environmental Impact Report released on March 6, 2019, if sufficient water is not available from the diversion of discharges to the SCRE, then the City may need to develop desalination facilities to meet 2035 water supply needs. Phase 2 of the proposed projects would augment water supplies to meet future water needs, including the accommodation of planned growth, either through increasing the amount of recycled water produced, or construction of an ocean desalination facility. This would be accomplished through either the expansion of the AWPF as a first option pending regulatory approvals, or, if this option is not approved or does not meet the City’s water supply needs, through construction of an ocean desalination facility. Since details of the ocean desalination project is in a preliminary stage, ocean desalination is identified as a potential additional future supply source.
5. PROGRAMS AND POLICIES

A. INTRODUCTION

In recent years, the City has faced consecutive years of persistent drought conditions. The previous Water Supply section shows that the City currently relies exclusively on local water supplies. The local water supplies are impacted by local rainfall, environmental factors, regulatory factors, operational factors, and legal constraints. Water conservation measures in addition to other policies assist the City in reducing its water demands. The following sections highlight the various programs and policies that have been enacted in previous years which enable the City to continue to provide reliable water sources to customers.

1. Water Conservation Measures/Water Efficiency Plan

Water conservation measures help to sustain our life source for future generations. In September 2011, City Council adopted a five-year Water Efficiency Plan which outlined existing programs and potential programs to engage customers in the pursuit of greater water efficiency. The Water Efficiency Plan focused on efforts including customer and student outreach, reducing outdoor landscape watering, optimizing operational practices, and expansion of recycled water usage. Staff continues to implement programs beyond the duration of the plan. In February 2014, in response to the current drought, City Council approved a voluntary 10% conservation cutback for Ventura customers. Subsequently, in September 2014, the City Council declared that Ventura was in a Stage 3 Water Shortage Emergency calling for 20% mandatory conservation cutback as local water supplies continued to drop during the third year of California's historic drought.

In May 2016, Governor Brown issued Executive Order B-37-16, “Making Water Conservation a California Way of Life”, which directed State agencies to establish a long term framework for water conservation and drought planning with four primary objectives: 1) use water more wisely, 2) eliminate water waste, 3) strengthen local drought resilience, and 4) improve agricultural water use efficiency and drought planning.

In April 2017, the Governor issued Executive Order B-40-17, which lifted the emergency drought declaration, retained prohibitions on wasteful practices, and advanced measures to implement “Making Water Conservation a California Way of Life.” Proposed legislation to implement the conservation framework was introduced in 2017. Two key long term conservation bills, Assembly Bill 1668 and Senate Bill 606, were signed into law on May 31, 2018.

Although the emergency drought declaration was lifted for the State in April 2017, City Council confirmed that the City remained in a Stage 3 Water Shortage Event in June 2018. Despite the Governor’s lifting of the State emergency drought declaration, the goals and objectives of “Making Water Conservation a
California Way of Life” remain consistent with the City’s ongoing water shortage response and future planned efforts.

The City offers a variety of conservation programs designed to help customers achieve voluntary and mandatory water usage reductions established locally and by the State.

Current programs include the following:

- **Mobile Reuse Program** – In June 2016, the City launched a program which provides high quality recycled water for local residents and commercial businesses. The recycled water can be picked up at the Fill Station located at the Ventura Water Reclamation Facility. Residents and City Parks and State Parks utilize the water for landscape irrigation while AERA Energy and Ventura County Transportation Department utilize the water for dust control. In 2018, a total of 4,728,702 gallons (14.52 acre-feet) of recycled water was served from the Fill Station. Benefits of the program included expanded recycled water usage in the City and conservation of potable water.

- **Water Wise Incentive Program** - Since 2015, the City has offered rebates to qualifying customers who replace their lawn with a water wise landscape. Since the project’s inception, approximately 500 projects have been completed with more than 572,844 square feet of turf removed, resulting in a projected water savings of 27.17 AFY.

- **High Efficiency Sprinkle Nozzles** - Beginning in 2016, Ventura Water has offered free high efficiency sprinkler nozzles to residential and commercial customers. As of December 2018, approximately, 6,498 sprinkler nozzles have been installed for an estimated water savings of 38.64 AFY.

- **Weather-Based Irrigation Controllers (WBIC)** - In June 2017, staff launched a Smart Irrigation Controller program. Qualifying customers received a free WBIC, professional installation of the unit, and on-site training. The program had a tremendous amount of participation. In March 2018, City Council approved additional funds to continue the program. As of December 2018, over 300 smart controllers have been installed for an estimated water savings of 8.69 AFY.

- **Water Efficiency Surveys (Water Audits)** - Since 2014, residential and commercial customers can request a free water efficiency survey, which includes investigating water use, detecting leaks, and educating customers on best practices for indoor and outdoor water efficiency. As of December 2018, over 500 surveys have been conducted across the City.

In addition to customer conservation programs, the City has implemented capital improvement projects and state of the art technologies designed to conserve water and improve water efficiency. In July 2017, Ventura Water began operating the Neutral Output Discharge Elimination System (NO-DES) unit for water distribution system flushing. Rather than flushing water out of the distribution system, the NO-DES truck circulates the water, filters it and puts it back into the system. The NO-DES truck is an innovative water
saving tool for the community.

In October 2018, the Ventura Water launched the Advanced Metering Infrastructure (AMI) Project which includes replacing approximately 32,000 manually-read water meters with smart meters over a three-year period. As of December 2018, over 3,200 meters have been upgraded. Benefits of AMI include advanced leak detection notification capabilities, enhanced accuracy in data and improved customer service.

2. 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 reduced water supplies due to the prolonged drought. The Task Force addressed revisions to the City’s Water Shortage Event Contingency Plan (below), 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.

In June 2015 Council approved the four-tiered (drought) water rate structure recommended by the Task Force that sends a strong message for conservation of Ventura’s local resources. The rates increased to achieve full revenue recovery within each tier or customer class, and by doing so, further encourage conservation.

3. Water Shortage Event Contingency Plan

It was proposed at the July 7, 2014 City Council Meeting that the existing Water Shortage Event 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 Event 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.

The Water Shortage Event Contingency Plan (WSECP) includes stages of action to respond to water shortage events. A water shortage event can be a single occurrence as short as twenty-four hours to a multi-year weather condition. Other events, besides drought, that could trigger a water shortage event include an earthquake, water system failures, fire, contamination, regional power outage, State restrictions
or other causes. The WSECP provides the following definition as written by the California Department of Water Resources:

Defining when drought occurs is a function of drought impacts to water users. Drought can best be thought of as a condition of water shortage for a particular user in a particular location. Hydrologic conditions constituting a drought for water users in one location may not constitute a drought for water users in a different part of California or for users with a different water supply. Individual water suppliers may use criteria such as rainfall/runoff, amount of water in storage, or expected supply from a water wholesaler to define their water supply conditions.

Drought is a gradual phenomenon. Although persistent drought may be characterized as an emergency, it differs from typical emergency events. Most natural disasters, such as floods or forest fires, occur relatively rapidly and afford little time for preparing for disaster response. Droughts occur slowly, over a period of time. There is no universal definition of when a drought begins or ends. Impacts of drought are typically felt first by those most reliant on annual rainfall – ranchers engaged in dryland grazing, rural residents relying on wells in low-yield rock formations, or small water systems lacking a reliable water source. Criteria used to identify statewide drought conditions do not address these localized impacts. Drought impacts increase with the length of a drought, as carry-over supplies in reservoirs are depleted and water levels in groundwater basins decline.

The Department of Water Resources most recently defined “drought condition” as “hydrologic conditions during a defined period, greater than one dry year, when precipitation and runoff are much less than average” (see Glossary in Section 1F).

The City developed a six-stage contingency plan to reduce demand up to 60% during a severe or extended water shortage event including both voluntary and mandatory stages. As mentioned in Section 5. Water Conservation Measures/Water Efficiency Plan, in September 2014, the City Council declared that Ventura was in a Stage 3 Water Shortage Emergency calling for 20% mandatory conservation cutback. The Stage 3 trigger indicates that annual supply projection is between 20% and 29% below normal year supply projection. The annual supply projection of 15,651 AF is from Table 4-2 of the current CWRR and the normal year supply of 19,600 AF is identified in Table 4-1 of the 2013 CWRR (below). The WSECP noted that the baseline supply value will not change through the duration of the event. Therefore the annual supply projection is 20.15% below normal year supply and the City remains in a Stage 3 Water Shortage Event. The City has remained in the current event since 2014, so Table 4-1 of the 2013 CWRR (below) is utilized for the baseline supply value.
4. **Establish Water Rights Dedication and Water Resource Net Zero (In Lieu) Fee Ordinance and Resolution**

In September 2012, Ventura Water took the concept of a water rights ordinance to Council. 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 can receive credit for the water savings, and thereby reduce the in-lieu fee they would 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. The Water Commission worked diligently on the draft Water Rights Dedication and Water Resource Net Zero Fee Ordinance and Resolution (“Ordinance”) from September 2015 to March 2016. The Water Commission approved a final draft at the March 22, 2016

### Table 4-1

<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>Current Supply (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Municipal Water District</td>
<td>5,000[^1]</td>
</tr>
<tr>
<td>Ventura River / Foster Park</td>
<td>4,200</td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>4,000</td>
</tr>
<tr>
<td>Oxnard Plain Groundwater Basin</td>
<td>4,100</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin</td>
<td>1,600</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>700</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19,600</strong></td>
</tr>
</tbody>
</table>

[^1]: Demand within Casitas service area is approximately 5,000 AFY at this time.
meeting for recommendation to Council in April 2016.

Public meetings on the draft Ordinance were held April 2016 through June 2016 with the Chamber of Commerce Group, City Planning Commission, Midtown Community Council, Building Industry Association (BIA) and developers, Eastside Community Council, and Westside Community Council. On June 6, 2016, City Council voted 6-1 to adopt the Ordinance and Resolution. On August 11, 2016, the Ordinance became effective and requires all new and intensified development to offset the demand associated with its impact on the water system. The Ordinance does not apply to projects for which entitlements have been approved or building permits issued prior to the effective date of the Ordinance. Funds collected through the implementation of this Policy will be utilized to fund future water supply projects.

5. **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 further amended the ordinance in May 2015 and a seven member Water Commission with two alternate members was formed as part of Ventura Water’s ongoing public outreach and education effort, and to help with long term planning.

The Water Commission reviews and makes advisory recommendations regarding water rates, water resource infrastructure projects in the five-year capital improvement program, the integrated water resource management plan, water supply options, the Urban Water Management Plan approval process, a water dedication and net zero fee requirement, and other water resources issues.

The Water Commission has reviewed and discussed the following general topics noted below as well as many specific topics since their initial meeting in June 2015 through December 2018.

- Santa Clara River Estuary Studies
- Water Wise Incentive Programs
- Public Outreach Program
- Sustainable Groundwater Management Act (SGMA)
- Overview of Local Groundwater Basins
- Model Water Efficient Landscape Ordinance
- Upper Ventura River GSA
- Mound Basin GSA
- Recycled Water Program
- Urban Water Management Plan
- Drought Update
- Public Outreach Programs
• Recycled Water Mobile Reuse
• Ocean Desalination
• Ventura Water Reclamation Facility Evaluation
• Water Rights Dedication and Water Resource Net Zero Policy
• Status on the Santa Paula Basin
• State Water Interconnection Project
• Community Development Update
• Drought and Water Shortage Update
• Water and Wastewater Rate Study
• Groundwater Sustainability Agencies
• Capital Improvement Program for Water and Wastewater Projects
• Operations and Capital Expenditure Requirements
• Brown Act Training and Water Commission Rules of Procedure
• Thomas Fire – Billing Policies and Recovery
• State Water Entitlement
• Regulatory and Legislative Impacts
• Potable Reuse
• State Water Contract and California WaterFix
• Water Loss Audits
• Advanced Metering Infrastructure
6. CONCLUSIONS & DISCUSSION

A. CONCLUSIONS

The City's total water demand for the most recent calendar year (2018) was 14,211 AFY. Over the past five years (2014-2018), the City experienced an average annual water demand of 14,727 AFY, and over the past ten years (2009-2018), the annual average water demand was 16,035 AFY. In the previous 2013 to 2016 CWRRs, the most recent 5-year average was used as the baseline demand condition. However, it was recommended in the 2016 CWRR that the City reconsider using the 5-year average and use the 10-year average in the 2017 CWRR. Thus, the 2017, 2018, and 2019 CWRRs utilize the 10-year average demand. Utilizing the previous 10-year City annual average, the baseline water demand for the 2019 CWRR is 16,035 AF, a decrease of 480 AF from the 2018 CWRR baseline water demand of 16,515 AF. This continued decrease is likely a result of: (1) approved water rate increases; (2) the June 2015 City Council approval of a four-tiered (drought) water rate structure; (3) the February 2014 City call for 10% voluntary conservation; and, (4) the September 2014 City declaration of a Stage 3 Water Emergency requiring customers to reduce their use by 20% due to the prolonged drought.

The City has a total of 53 projects that are under construction or approved for development. These projects include an additional 491,276 SF of non-residential development and 3,417 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 1,346 AFY. Therefore, the estimated water demands total 17,402 AFY. This report assumes that the currently under construction and approved projects will be completed by year 2023.

The 2019 CWRR projects out the demands to the Year 2030 which is beyond the year that the approved projects would be fully vested. In order to project out the estimated demand for the Years 2024 through 2030 an approximate growth rate of 0.54% (Per City Planning Department based on the Department of Finance historical data for population) was used to estimate the increase in demand from the time all approved projects were fully vested (Year 2023) to the Year 2030.
The City’s projected available water supply is constantly changing, depending upon environmental, regulatory, operational, and legal constraints. The City’s normal year water supply is 21,415 AFY; however, the available water supply is estimated at 15,651 AFY in 2019.

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 582 AFY by 2023 (as calculated in Table 3-6) to meet the additional water demand in the Casitas boundary.

Table 6-1 provides a comparison of the existing water demand and supply, and the near-term water demand and supply. While the projected water supply in a 2019 and 2021 drought scenario is less than the projected demand, it should be noted that demand during drought periods has been less than projected in recent years.

The water supply range and demand projections are also depicted graphically in Figure 6-1.
### Table 6-1
Demand vs. Supply Comparison

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>14,262</td>
<td>17,111</td>
<td>16,515</td>
<td>Low</td>
<td>-</td>
<td>High</td>
<td>-</td>
</tr>
<tr>
<td>2017</td>
<td>13,973</td>
<td>16,515</td>
<td></td>
<td>Low</td>
<td>-</td>
<td>High</td>
<td>-</td>
</tr>
<tr>
<td>2018 (Drought)</td>
<td>14,211</td>
<td>16,035</td>
<td>15,321</td>
<td>Low</td>
<td>-6.5%</td>
<td>High</td>
<td>-6.5%</td>
</tr>
<tr>
<td>2019 (Drought)</td>
<td>12,958</td>
<td>16,304</td>
<td>15,651</td>
<td>Low</td>
<td>-4.0%</td>
<td>High</td>
<td>-4.0%</td>
</tr>
<tr>
<td>2020 (Drought)</td>
<td>13,067</td>
<td>16,573</td>
<td>17,020</td>
<td>Low</td>
<td>2.7%</td>
<td>High</td>
<td>2.7%</td>
</tr>
<tr>
<td>2021 (Drought)</td>
<td>13,178</td>
<td>16,842</td>
<td>15,641</td>
<td>Low</td>
<td>-1.8%</td>
<td>High</td>
<td>-1.8%</td>
</tr>
<tr>
<td>2021</td>
<td>16,842</td>
<td>20,858</td>
<td>19.3%</td>
<td>Low</td>
<td></td>
<td>High</td>
<td>19.3%</td>
</tr>
<tr>
<td>2022</td>
<td>17,112</td>
<td>20,974</td>
<td>18.4%</td>
<td>Low</td>
<td></td>
<td>High</td>
<td>18.4%</td>
</tr>
<tr>
<td>2023</td>
<td>17,381</td>
<td>21,091</td>
<td>17.6%</td>
<td>Low</td>
<td></td>
<td>High</td>
<td>17.6%</td>
</tr>
<tr>
<td>2024</td>
<td>17,475</td>
<td>21,122</td>
<td>17.3%</td>
<td>Low</td>
<td></td>
<td>High</td>
<td>17.3%</td>
</tr>
<tr>
<td>2025</td>
<td>17,571</td>
<td>23,954 – 27,007</td>
<td>26.6% – 34.9%</td>
<td>Low</td>
<td></td>
<td>High</td>
<td>34.9%</td>
</tr>
<tr>
<td>2026</td>
<td>17,666</td>
<td>23,987 – 27,040</td>
<td>26.4% – 34.7%</td>
<td>Low</td>
<td></td>
<td>High</td>
<td>34.7%</td>
</tr>
<tr>
<td>2027</td>
<td>17,763</td>
<td>24,019 – 27,072</td>
<td>26.0% – 34.4%</td>
<td>Low</td>
<td></td>
<td>High</td>
<td>34.4%</td>
</tr>
<tr>
<td>2030[^4]</td>
<td>18,055</td>
<td>24,282 – 28,535</td>
<td>25.6% – 36.7%</td>
<td>Low</td>
<td></td>
<td>High</td>
<td>36.7%</td>
</tr>
</tbody>
</table>

[^1] Projected Drought Demand equals a 20% reduction (Stage 3 mandatory conservation) of the calculated projected water demand described above.
[^2] Per Table 3-8.
[^3] Per Table 4-3.
[^4] Projected Normal Demand using approximately .54% growth rate to 2030. The approximately 0.54% growth rate per City Planning Department's data was used to estimate the increase in demand.
[^5] Percent differences calculated between projected normal demand and the high and low supply range.
*2013 Normal Supply is the baseline value for determining the Water Shortage Event Stage.

*Figure 6-1: Demand vs. Supply Comparison*
Figure 6-1: Near-term Demand vs. Supply Comparison
B. DISCUSSION

The results of this Report indicate that, in the near term, the spread between the current water demand and the current water supply is very tight. If the continued drought condition persists, the supply could be less than the demand. The City’s customers will need to continue to conserve and/or pay penalties for overuse of the City’s water supply sources while the City secures new water supplies. This presents short-term challenges for the City as it continues to allocate water supply to development projects that will generate additional water demands. The City will continue to track-perform the following on an annual basis and publish the results in the annual Comprehensive Water Resources Report:

1. Provide total water consumption for the previous calendar year.
2. Re-calculate the 3-year, 5-year and 10-year water consumption averages.
3. Update the water supply portfolio.
4. Update the existing land use data.
5. Evaluate all future development projects based on current supply and demand conditions.
6. 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.
7. Continue to develop water supply through demand side management, secure water rights, administer the Water Rights Dedication and Water Resource Net Zero Ordinance approved in July 2016 and continue to integrate the new water supply sources into the City’s water supply portfolio.

The City has always worked to address long-term water demands with effective planning and development of additional future water supplies. As discussed in Section 4 of this report, the City currently has two proposed water supply projects in the planning stages: VenturaWaterPure and the State Water Interconnection Project. These two proposed projects together would ensure that the City has adequate supplies for future demand under various climatic conditions. In planning for these projects, the City must consider the uncertainty in both the demand projections and the supply projections.

Current demand projections assume that the conservation that has occurred during the multi-year drought that began in 2013 will continue into the future. While the City continues to encourage conservation and the State has passed legislation to encourage “conservation as a way of life”, the City has limited control over the amount of water its citizens utilize. The effects of conservation on water demand projections are illustrated in Table 6-42 which compares the long-
term demand projections from this report with those included in the 2015 Urban Water Management Plan.

### Table 6-2
Comparison of Demand Projections (AF)

<table>
<thead>
<tr>
<th>Document</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 UWMP</td>
<td>20,245</td>
<td>20,930</td>
<td>21,512</td>
</tr>
<tr>
<td>2019 CWRR</td>
<td>16,573</td>
<td>17,571</td>
<td>18,055</td>
</tr>
</tbody>
</table>

However, the supply projections presented in Table 6-1 and Figure 6-1 only project supplies for normal years after 2021. Table 6-2 summarizes the uncertainty and sensitivity to climate variations of each water supply source. The purpose of this table is to illustrate that the City's water supplies are vulnerable to many factors outside of the City's control. Consequently, water supply projections past 2021 are highly uncertain. Table 6-4 presents additional water supply scenarios to illustrate the vulnerability of the City's existing water supplies and how the water supplied by the proposed State Water Interconnection and VenturaWaterPure projects would be utilized to meet water demands in the future. Figure 6-2 illustrates the potential future water supply scenarios presented in Table 6-4.

In addition to the uncertainty in the water supply projections, the water demand projections are also uncertain. Current demand projections assume that the conservation that has occurred during the multi-year drought that began in 2013 will continue into the future. While the City continues to encourage conservation and the State has passed legislation to encourage "conservation as a way of life", the City has limited control over the amount of water its citizens utilize. The effects of conservation on water demand projections are illustrated in Table 6-4 which compares the long-term demand projections from this report with those included in the 2015 Urban Water Management Plan.

Placeholder for Table 6-2 (will be provided on 2/23 for discussion).
### TABLE 6-4: CITY OF VENTURA WATER SUPPLY SOURCES - POSSIBILITIES, CHALLENGES AND UNCERTAINTIES

<table>
<thead>
<tr>
<th>Supply Component</th>
<th>Range of Available Data (Year)</th>
<th>Estimated Minimum</th>
<th>Estimated Maximum</th>
<th>Potential Environmental/Regulatory/Legal Constraints</th>
<th>Potential Climatic Change Impacts</th>
<th>Sensitivity to Annual Variations in Precipitation</th>
<th>Potential Opportunities to Increase Supply</th>
<th>Structural Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Reservoir</td>
<td>1962-2019</td>
<td>322 to 6,177</td>
<td>3,262</td>
<td>3,862</td>
<td>Current supply reflects current allocation from the Casitas Groundwater Management Agency (CGMMA). Allocation will be released in the next two years as the CGMMA Sustainability Plan (SPP) is completed.</td>
<td>Sustainable yield of the basin will be established utilizing historical landscape and topographical data. Groundwater Sustainability Plan (GSP) will be completed.</td>
<td>Not sensitive - Given allocated portion of sustainable yield which is consistent with annual fluctuations in precipitation.</td>
<td>Limited - Natural allocation may be higher, but will likely be determined annually over the next 10 years. Water Supply project (Casitas and connected through the PCH) would increase allocations. Future trading program could allow for city water of sell or annual allocations.</td>
</tr>
<tr>
<td>Santa Rosa Groundwater Basin</td>
<td>1962-2019</td>
<td>0 to 3,896</td>
<td>3,182</td>
<td>3,541</td>
<td>Current supply reflects current allocation according to a court-imposed judgment.</td>
<td>Santa Rosa Basin Technical Advisory Committee (TAC) is charged with establishing a pumpage amount to maintain conditions in the basin, including but not necessarily limited to verification of active pumping amounts, inventory of groundwater levels, estimates of water in and out of the basin, increases and decreases in groundwater storage, and analyses of groundwater levels. The judgment also allows for the development of a management plan for the operation of the basin and empowers the TAC to determine the yield of the basin.</td>
<td>Not sensitive - City received an annual allocation of groundwater according to the judgment.</td>
<td>Limited - “Adjudicated” basis, would require measurement of basin yield. Allotments could decrease if trigger is met to decline in water levels. Allotment is based on predating from each event, on City’s predating water use in some years.</td>
</tr>
<tr>
<td>Inland Groundwater Basin</td>
<td>1962-2019</td>
<td>219 to 6,529</td>
<td>3,861</td>
<td>4,093</td>
<td>The Inland Basin Sustainability Agency (IBSA) will determine the sustainable yield of the basin through the GSP development process.</td>
<td>Sustainable yield of the basin will be established utilizing historical landscape and topographical data. Groundwater Sustainability Plan (GSP) will be completed.</td>
<td>Not sensitive - City will be allocated a portion of the basin’s sustainable yield which is consistent with annual fluctuations in precipitation.</td>
<td>Possible - The sustainable yield for the basin has not yet been determined. The IBSA will likely develop allocations of sustainable yield through its GSP development process.</td>
</tr>
<tr>
<td>Costal Groundwater</td>
<td>2013-2019</td>
<td>2,798 to 5,074</td>
<td>3,173</td>
<td>6,700</td>
<td>The MARES and Colluvium Department of Flood Mitigation (CMDFM) are currently working to identify potential areas that may be used to enhance and establish increased flow for recharge to the Ventura River Agricultural. This effort could result in the development of flow credits for the MARES and Colluvium Department of Flood Mitigation (CMDFM) for the purposes of increasing groundwater recharge in the Ventura River Agricultural. The City is currently working to connect these efforts to existing flows through a collaborative settlement process.</td>
<td>Most climate change projections call for more intense rainfall, although not necessarily more annual rainfall. This may allow increased pumping allowing during certain rainfall events while still meeting increased flow requirements. Increased frequency and duration of drought periods could also reduce available supplies.</td>
<td>Not sensitive - River flows are directly related to the amount of annual rainfall.</td>
<td>Possible - Reduced flood and drought hazard would allow increased streamflow. Long-term objectives to increase to 1,500 AFY in wet years.</td>
</tr>
<tr>
<td>Casitas Reservoir</td>
<td>1962-2019</td>
<td>1,219 to 9,375</td>
<td>3,173</td>
<td>6,700</td>
<td>With average 10- and 50-year Considerations have reduced allowable diversions from Ventura River.</td>
<td>Most climate change projections call for more intense rainfall, although not necessarily more annual rainfall. This may allow increased pumping during certain rainfall events while still meeting flow requirements. Increased frequency and duration of drought periods could also reduce available supplies.</td>
<td>Not sensitive - River flows are directly related to the amount of annual rainfall.</td>
<td>Possible - Reduced flood and drought hazard would allow increased streamflow. Long-term objectives to increase to 1,500 AFY in wet years.</td>
</tr>
<tr>
<td>Lake Casitas</td>
<td>1962-2019</td>
<td>715 to 8,956</td>
<td>1,285</td>
<td>6,267</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aqueduct System</td>
<td>1962-2019</td>
<td>434,663</td>
<td>700</td>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenic Water Project</td>
<td>1962-2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Plan</td>
<td>N/A</td>
<td>2,000</td>
<td>4,200 to 5,420</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Higher demand in dry years, lower demand in wet years.
- Higher demand in dry years, lower demand in wet years.
- Limited - Completion of the State Water Project and planning phases would allow for City to receive water allocations during drought periods. |
- Required construction of additional infrastructure for longer-term storage.
- Required construction of advanced water treatment facilities. 
- Required construction of advanced water infrastructure to meet future demand.

2019 COMPREHENSIVE WATER RESOURCES REPORT FINAL DRAFT REPORT: MAY 20, 2019
### Table 6-34: Potential Future Water Supply Scenarios

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Municipal Water District</td>
<td>5,872</td>
<td>4,110</td>
<td>0</td>
<td>5,904</td>
<td>4,133</td>
<td>0</td>
<td>6,067</td>
<td>4247</td>
<td>0</td>
</tr>
<tr>
<td>Ventura River / Foster Park</td>
<td>4,200</td>
<td>2,323</td>
<td>2,323</td>
<td>3647 - 6700</td>
<td>2,323</td>
<td>2,323</td>
<td>3647 - 6700</td>
<td>2,323</td>
<td>2,323</td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4000</td>
<td>4000</td>
</tr>
<tr>
<td>Oxnard Plain Groundwater Basin</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3862</td>
<td>3862</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin</td>
<td>3,000</td>
<td>1,141</td>
<td>1,141</td>
<td>3,000</td>
<td>1,141</td>
<td>1,141</td>
<td>3,000</td>
<td>1141</td>
<td>1141</td>
</tr>
<tr>
<td>City Acquired Water Rights</td>
<td>41</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>865</td>
<td>700</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Direct Potable Reuse</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>2800</td>
<td>2800</td>
<td>2800</td>
<td>2800</td>
<td>2800-4000</td>
<td>2800-4000</td>
</tr>
<tr>
<td>Total</td>
<td>21,675</td>
<td>16,177</td>
<td>12,067</td>
<td>23,954-27,007</td>
<td>19,000</td>
<td>14,867</td>
<td>19,114-20,314</td>
<td>14,867-16,067</td>
<td></td>
</tr>
<tr>
<td>State Water</td>
<td>0</td>
<td>1,298</td>
<td>5,408</td>
<td>0</td>
<td>2,704</td>
<td>0</td>
<td>0</td>
<td>1,988-3,188</td>
<td></td>
</tr>
<tr>
<td>Projected Demand</td>
<td>17,475</td>
<td>17,475</td>
<td>17,475</td>
<td>17,571</td>
<td>17,571</td>
<td>17,571</td>
<td>18,055</td>
<td>18,055</td>
<td>18,055</td>
</tr>
</tbody>
</table>

1. Normal = Wet Year with average to above average rainfall. No stages of the City’s Water Shortage Event Contingency Plan are in effect; all City facilities are operating normally and not restricted for operational reasons.
2. Multi-year Drought Supply = Multiple years of below average rainfall. Casitas = Stage 3; Ventura River = Average of 2014-2018 Production; Santa Paula Basin is at Stage 2.
3. Emergency Supply Scenario = Multi-year drought assumptions plus no supply from Casitas.
4. State Water = Difference between projected demand and total supply from other sources.
Figure 6-2: Potential Future Water Supply Scenarios

![Bar chart showing potential future water supply scenarios for 2024, 2025, and 2030. The chart includes normal supply, multi-year drought supply, emergency supply scenario, and projected demand for various water sources such as Lake Casitas, Ventura River/Foster Park, VenturaWaterPure, recycled water, groundwater wells, and state water.]
2019 COMPREHENSIVE WATER RESOURCES REPORT

FINAL DRAFT Report

Prepared by: Ventura Water
501 Poli Street
Ventura, CA 93002

Staff: Betsy Cooper, P.E.
Susan Rungren, P.E.
Nikhil Dhir
Jennifer Tribo
Monica Noeng

MAY 20, 2019
EXECUTIVE SUMMARY

Background and Purpose
In 2010 Public Works conducted a workshop with City Council that included information on the City's water supply issues. It was presented that with continued years of drought, tightening water restrictions and environmental responsibilities, Ventura's water supply was being impacted by several factors. A recommendation from the workshop was to provide a comprehensive evaluation of current and projected water supply needs. In June 2013, the first Comprehensive Water Resources Report (CWRR) was developed as a result. The CWRR is intended to be a tool in the development review process as it pertains to water supply and demand. The CWRR tracks proposed development projects, consistently calculates the anticipated increase in water demand associated with each proposed development project, and then evaluates the impact on the current water supply.

Previous Council Action
On June 10, 2013 the City Council approved the first 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.
On May 18, 2015 the City Council approved the 2015 Comprehensive Water Resources Report.
On June 13, 2016, the City Council approved the 2016 Comprehensive Water Resources Report.
On April 24, 2017, the City Council received the 2017 Comprehensive Water Resources Report.
On June 4, 2018, the City Council received the 2018 Comprehensive Water Resources Report.

2019 CWRR Updates
Major updates to the 2019 CWRR include a revised methodology for determining the water loss factor, revised methodology for calculating future demand projections, additional language in the Water Supply and Programs and Policies (Sections 4 and 5) clarifying Casitas Municipal Water District (CMWD) Stage conditions and water shortage events, and a revamped Conclusions and Discussion (Section 6). Per Water Commission request, a glossary has been added to Section 1F to define terms including “Drought” and “Normal”, and new Tables 6-3 and 6-4 and Figure 6-2 have been added to address future uncertainties in water supply and possible scenarios where future supplies are not “Normal”. Further updates are summarized below.
A summary of the most current and best information available on our water supply and demand is shown in Table ES-1 below.

### Table ES-1

**Summary of Water Supply and Demand**

<table>
<thead>
<tr>
<th></th>
<th>Projected</th>
<th>2019 Drought (AFY)</th>
<th>2020 Drought (AFY)</th>
<th>2021 Drought (AFY)</th>
<th>2025 (AFY)</th>
<th>2030 (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>15,651</td>
<td>17,020</td>
<td>16,541</td>
<td>23,954 - 27,007</td>
<td>24,282 - 28,535</td>
<td></td>
</tr>
<tr>
<td>Demand*</td>
<td>16,304</td>
<td>16,573</td>
<td>16,842</td>
<td>17,571</td>
<td>18,055</td>
<td></td>
</tr>
<tr>
<td>Available Supply</td>
<td>(653)</td>
<td>447</td>
<td>(301)</td>
<td>6,383 – 9,436</td>
<td>6,227 – 10,480</td>
<td></td>
</tr>
</tbody>
</table>

*Demand equals baseline 10 year average (16,035 AF) plus the estimated demand from the approved projects list for future years fully vested in 2023 and using an approximate 0.54% growth rate to 2030 (Table 3-8 & 6-1). Assumes a new supply source (VenturaWaterPure) starting in 2025.

As shown in Table ES-1, the projected 2019 and 2021 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 conserve and comply with the Stage 3 water shortage event conservation measures. In addition to continued conservation, the City may be required to use water in excess of the anticipated amounts from the City’s water supply sources which could result in the payment of penalties, (i.e. extraction of groundwater from the Oxnard Plain Groundwater Basin in excess of the City’s extraction allocation). The City has always worked to address long-term water demands with effective planning and development of additional future water supplies. The City currently has two proposed water supply projects in the planning stages: VenturaWaterPure and the State Water Interconnection Project, which together would ensure that the City has adequate supplies for future demand under various climatic conditions. The 2019 CWRR includes the addition of new Tables 6-3 and 6-4 and Figure 6-2 to address future water supply in 2024, 2025, and 2030 under a normal year, multi-year drought, and emergency supply scenarios. The purpose of these additions is to illustrate that the City’s water supplies are vulnerable to many factors outside of the City’s control. Consequently, water supply projections past 2021 are highly uncertain. For a detailed discussion, please refer to Section 6 of the report.

### Baseline Demand

Utilizing the previous 10-year (2009 to 2018) City annual average, the baseline water demand for the 2019 CWRR is 16,035 AF. The baseline water demand has been decreasing each year (with the exception of the Calendar Year 2016). In February 2014, City Council called for 10% voluntary conservation, followed by the September 2014 City declaration of a Stage 3 Water Shortage Event requiring customers to reduce their use by 20% due to the prolonged drought. In June 2015, City Council approved a four-tiered (drought) water rate structure. In June 2018, the City Council confirmed that the City remained in a Stage 3 Water Shortage Event.
The annual water consumption figures for the past 10 years are provided in subsection 3.D.

**Future Demand Projections (Year 2030)**

This report projects growth through 2030. The proposed near-term development projects that have been approved but are not yet connected to the City’s water system are used to project water demands for the next five years (2023). In order to project the estimated demand to the Year 2030, an approximate growth rate of 0.54% (per City Planning Department based on the Department of Finance historical data for population) was used to estimate the increase in demand from the time all approved projects are projected to be completed (Year 2023) to the Year 2030.

**Normal Water Supply**

The City’s normal (non-drought) water supply is summarized in Table 4-1. The City’s normal supplies include Casitas Municipal Water District (Casitas), Ventura River/Foster Park, Mound Groundwater Basin, Oxnard Plain Groundwater Basin, Santa Paula Groundwater Basin, and Recycled Water.

- **Casitas**: In May 2017, the City Council approved the new Water Services Agreement between the City and Casitas. Based on the new agreement, the five year average normal (non-drought) water supply from Casitas is estimated to be 5,062 AFY. To calculate the normal water supply from Casitas, the demand from the proposed development projects that are anticipated to be utilizing water by Fiscal Year 2019 are added to the five year average normal (non-drought) water supply from Casitas of 5,062 AFY (past five non-drought fiscal years FY 09-10 to FY 13-14). Therefore, the normal water supply from Casitas is estimated to be 5,375 AFY.

- **Ventura River/Foster Park**: The City’s historic production based on the 50-year average production from 1950-2000 was 6,015 AFY. However, current operational constraints allow a diversion efficiency of up to 70 percent (average 4,200 AFY) to be obtained under the City’s operations schedule, which can be considered reliable for planning purposes. Therefore, the City’s normal water supply from the Ventura River / Foster Park is 4,200 AFY.

- **Mound Groundwater Basin**: The City’s average annual extraction from 2000 to 2009 was approximately 4,000 AFY. Therefore, the City’s normal water supply from the Mound Basin is 4,000 AFY.

- **Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)**: The City's historical allocation was set by the Fox Canyon Groundwater Management Agency (FCGMA) at 5,472 AFY, which was the average extraction from the Golf Course Wells for the base period 1985 to 1989. Beginning in 1992, historical extractions set by the FCGMA were reduced by five percent (5%) to 5,198 AFY, in 1995 it was
reduced to 4,925 AFY, in 2000 it was reduced to 4,651 AFY and further reduced in 2010 to the current allocation of 4,100 AFY. Therefore the City’s normal (pre FCGMA Emergency Ordinance E) water supply from the Oxnard Plain Basin is 4,100 AFY.

- Santa Paula Groundwater Basin (Santa Paula Basin): In March 1996, the City ended a five-year stalemate over the use of the Santa Paula Basin. Under a court stipulated judgment, the United Water Conservation District (UWCD), the Santa Paula Basin Pumpers Association (SPBPA; an association of ranchers and businesses), and the City all have an interest in the Santa Paula Basin. The City can pump on average 3,000 AFY from the Santa Paula Basin. In addition, the City has acquired 40.9 acre-feet of water rights in the Santa Paula Basin. Therefore, the City’s normal water supply from the Santa Paula Basin is 3,041 AFY.


The City’s normal water supply portfolio is 21,415 AFY and is summarized in Table 4-1.

**Current Water Supply**

The City’s current water supply sources under existing conditions for calendar year 2019 is summarized in Table 4-2.

- **Casitas:** The May 2017 Water Services Agreement indicates that, in the event that Casitas must enact its Water Efficiency and Allocation Program (WEAP) due to a water shortage, Casitas may adjust the City’s allocation consistent with the percentage reduction for the WEAP stage. As of April 2019, Casitas is currently in a Stage 3 water supply condition per Casitas Resolution No. 16-09. In order to be conservative, the 2019 CWRR assumes that Casitas will remain in a Stage 3 Condition, and imposes a reduction of 30% to the City’s Casitas supply consistent with the Stage 3 mandates. Therefore, the City’s current water supply from Casitas is 3,763 AFY for calendar year 2019.

- **Ventura River/Foster Park:** Due to the continued drought conditions and heightened environmental requirements, the City’s ability to draw water from the Ventura River continues to be significantly challenged and impacted. To determine the City’s current water supply with the existing drought conditions, the five year production average from 2014 to 2018 was selected. Therefore, the City’s current water supply from Ventura River / Foster Park is 2,323 AFY for calendar year 2019.

- **Mound Groundwater Basin:** Due to operational constraints, production from the Mound Basin has been lower than the historical 10 year average for the Normal Water Supply. To determine the City’s
current water supply with the existing drought conditions, the two year production average from 2017 to 2018 was selected. This date range was selected since it reflects recent operational constraints due to the current condition of the City’s existing wells in this basin. Therefore, the City’s current water supply from the Mound Basin is 1,963 AFY for calendar year 2019.

- **Oxnard Plain Groundwater Basin (Fox Canyon Aquifer):** Per approval of Emergency Ordinance E in 2014, the City’s Temporary Extraction Allocation (TEA) is 4,827 AFY (based on an operator’s average annual reported extractions for 2003 through 2012). Phased reductions were set beginning July 1, 2014 with a 20% total reduction of the TEA on January 1, 2016. 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. Therefore, the City’s current water supply from the Oxnard Plain is 3,862 AFY for calendar year 2019.

- **Santa Paula Groundwater Basin (Santa Paula Basin):** The Santa Paula Basin Judgment allows the City to utilize 3,000 AFY. No reductions to this supply is anticipated for this year; therefore, the City’s current water supply from the Santa Paula Basin is 3,041 AFY (includes City acquired water rights) for calendar year 2019.

- **Recycled Water:** As stated in the 2015 Urban Water Management Plan, the City’s projected annual recycled water demand for 2019 is approximately 700 AFY. Therefore, the City’s current recycled water demand is 700 AFY for calendar year 2019.

The City’s current water supply for 2019 (drought) is 15,651 AF and summarized in Table 4-2.

The above evaluation of the current conditions of each water supply source along with the triggers outlined in the Water Shortage Event Contingency Plan (WSECP) (see Section 5) indicates that the City remains in a water shortage event following consecutive years of drought. The WSECP specifies that the water shortage stage trigger is calculated by comparing the Annual Supply Projection to the Normal Year Supply Projection. The WSECP also states that the Normal Year Supply Projection will not change for the duration of the shortage event. The annual supply projection from Table 4-2 in the 2019 CWRR is 15,651 AFY. The normal year supply projection from Table 4-1 of the 2013 CWRR is 19,600 AFY. Therefore, the annual supply projection is 20.15% below normal year supply and the City remains in a Stage 3 Water Shortage Event.

**Projected Future Water Supply**

The City’s projected future water supply numbers forecasts an additional two years of drought through 2021 (for a total duration of a 10 year drought) and evaluates supply through 2030. The projected future water
supply also assumes that the City will revert to normal conditions in 2025 through 2030. The City’s projected future water supply takes into account impacts from the Sustainable Groundwater Management Act of 2014. The City’s projected future water supply is summarized in Table 4-3.

- **Casitas:** As mentioned previously, Casitas is currently in a Stage 3 water supply condition. This report assumes a reduction of 30% to the City’s Casitas supply for the 2020 Supply Drought Impact and a 40% reduction for 2021. Therefore, the City’s projected supply from Casitas for 2020 is 3,844 AFY (30% reduction) and 3,365 AFY in 2021 (40% reduction). The Casitas projected supply in 2025 and 2030 includes growth projections within Casitas’ boundaries. Therefore, the City’s projected supply from Casitas is 5,904 AFY for 2025 and 6,067 AFY for 2030.

- **Ventura River/Foster Park:** If the current drought continues through 2021, the supplies will be further impacted. To determine the 2020 and 2021 supply drought impact, the average of the two most recent driest years (2015 and 2016) was used for the projections. Therefore, the projected future water supply for 2020 and 2021 from the Ventura River / Foster Park is 1,573 AFY. The 2025 and 2030 projected future water supply assumes normal conditions. The 2018 Capital Improvement Program includes the Foster Park Wellfield Production Restoration project, which is scheduled to be completed by 2025. The project involves the replacement of the destroyed wells and construction of new facilities to restore historic production capabilities of 6,700 AFY. The low end equals the City’s highest production value for the past 10 years (2009 to 2018), and the high end equals the expected production from the completed Foster Park Wellfield Production Restoration project. Therefore, the projected future water supply for 2025 and 2030 from the Ventura River / Foster Park is 3,647 – 6,700 AFY.

- **Mound Groundwater Basin:** Mound Wells 2 and 3 are anticipated to come online within the next few years. Thus, the projected water supply from the Mound Basin for the future is greater than the current 2019 supply of 1,963 AFY (discussed in the Current Supply section above). Although 2020 and 2021 future projections are evaluated under drought impact, the addition of Mound Wells 2 and 3 will help alleviate current operational constraints. Since Mound Well 3 is expected to be operational in 2020, the 10 year average (2000 to 2009) was used to calculate the 2020, 2021, 2025 and 2030 supply numbers. Therefore, the projected future water supply from the Mound Basin from 2020 to 2030 is 4,000 AFY.

- **Oxnard Plain Groundwater Basin (Fox Canyon Aquifer):** As discussed in the Current Water Supply section, the City’s allocation is 3,862 AFY until further action is taken by the FCGMA. Therefore, the projected future supply from the Oxnard Plain Basin for 2020, 2021, 2025, and 2030 is 3,862 AFY.
• Santa Paula Groundwater Basin (Santa Paula Basin): As discussed previously, the Santa Paula Basin is subject to a stipulated judgment and is managed by the Santa Paula Basin Technical Advisory Committee (TAC) with equal representation from UWCD, SPBPA, and the City. The TAC is charged with various responsibilities including establishing a program to monitor conditions in the basin. If basin conditions change, then the City may have reductions in pumping allocations. Stage 2 reduces the City’s pumping to 1,141 AFY, Stage 3 reduces the City’s pumping allocations to 641 AFY, Stage 4 reduces the City’s pumping allocations to 481 AFY and Stage 5 reduces the City’s allocations to zero. Currently, the TAC is working on various basin management measures, including potential triggers for the above stages and potential projects to enhance the sustainable yield of the basin.

Based on recent work completed by the technical working group regarding conditions in the Basin, it is projected that no Stage reductions will be implemented even if the drought remains in effect through 2021. It is also projected that under normal conditions in 2025 to 2030, that the allocation will remain at 3,000 AFY. Additional water rights of 40.9 AF total were acquired for the past development of Tract 4632, Phase I of Tract 5632, and Tract 5774.

Therefore, the projected future water supply in 2020, 2021, 2025 and 2030 is 3,000 AFY for the original City allocation and 40.9 AFY for City acquired water rights.

• Recycled Water: The estimated anticipated future water supply for recycled water is based on the 2015 Urban Water Management Plan projections for recycled water.

• VenturaWaterPure: The City of Ventura is currently in the planning phases for the proposed VenturaWaterPure Project which includes additional diversion of tertiary treated effluent to a new Advanced Water Purification Facility (AWPF) for potable reuse. Potable reuse is the proven use of recycled water to supplement drinking water supplies. After years of special studies, environmental assessment, demonstration facility testing, and stakeholder meetings, the City determined the best way to enhance environmental protection while improving local water quality and supply reliability is to divert highly treated wastewater discharges for reuse. The final product of this state-of-the-art AWPF would be a new, locally owned source of highly purified drinking water that provides Ventura with a long-term drought resilient water supply solution. On March 6, 2019, the City released the Ventura Water Supply Projects Draft Environmental Impact Report (EIR) for public review and written comment. Upon completion of the environmental review process, the next steps include permitting, final design, and bidding for construction.

One objective of the VenturaWaterPure Project is to protect the ecology of the Santa Clara River
Estuary (SCRE). The City is party to a Consent Decree that expresses the City’s commitment to pursue “environmentally protective, sustainable, and integrated water supply and wastewater discharge practices . . . [including] infrastructure options for Ventura’s reclamation and diversion of an ecologically appropriate volume” of tertiary-treated flows produced by the existing Ventura Water Reclamation Facility (VWRF) and currently discharged to the SCRE. The Consent Decree requires such diverted flows to be dedicated to “water reclamation uses,” including local water supply augmentation to the maximum extent feasible.

The City has conducted extensive analysis of the SCRE, including estimated ecological effects of reduced discharges on the SCRE. This analysis is compiled in several reports and reviews mandated by the Consent Decree, including the Phase 1, 2, and 3 Studies, the Technical Review Team (TRT) Report, the Scientific Review Panel (SRP) Final Report, and the TRT review supporting the conclusions and recommendations in the SRP Final Report.

Based on the scientific record and feedback from the agencies, the City is proposing additional phasing to the implementation approach that would commit to a Continued Discharge Level (CDL) of 1.9 MGD by the end of year 2025, with a planned reduction to a CDL of 0 to 0.5 MGD during closed berm conditions by the end of year 2030. This phased implementation approach is the basis of the proposed project’s designed flow rate and minimum treatment capacity.

Based on the completion of the Special Studies and additional assessments detailed in the Draft EIR, the future water supply provided by the VenturaWaterPure Project is projected to be 2,800 AFY in 2025 and 2,800 AFY to 4,000 AFY in 2030.

- **State Water Project:** The City has a 10,000 acre-foot per year allocation from the California State Water Project (SWP). To date, the City has not constructed the improvements necessary to receive direct delivery of its allocation. Ventura Water is pursuing the State Water Interconnection Project with Calleguas Municipal Water District (Calleguas), Casitas Municipal Water District (Casitas), and United Water Conservation District (United). In 2017, City Council authorized an alignment study by Kennedy/Jenks to determine how the interconnection project can be designed and operated to supply water to serve the regional needs of the City, Calleguas, Casitas, and UWCD. The final alignment study was completed in 2018. A Draft Environmental Impact Report (EIR) was prepared to evaluate the potential environmental impacts associated with construction and operation of the interconnection pipeline and associated facilities. The Draft EIR was circulated for a 45-day public review period on February 19, 2019. As stated in the Draft EIR, the project will enable delivery of SWP water by wheeling through Metropolitan Water District of Southern California and Calleguas to the City. The connection will also facilitate direct delivery of SWP water to United and direct or in-lieu delivery of SWP water to Casitas. The interconnection will be an approximately 7 mile pipeline used to transport water between Calleguas’ and the City’s distribution systems.
The Draft EIR also states that, although the proposed State Water Interconnection Project is not anticipated to increase water supply volume for the City, it would improve system reliability by acting as a replacement supply source for existing water supplies (Lake Casitas, Ventura River, and groundwater) that have been reduced or have become less available. Additionally, SWP water is a near-term option for providing the necessary water to dilute high Total Dissolved Solids (TDS) levels in groundwater to improve system water quality. Operational details will be developed through the project design and planning process and negotiations with project partners. These details will be reflected in future CWRRs when available.

While the City's water supply contract for SWP water provides the City with a maximum annual allocation of 10,000 AF, the actual allocation of available water is set by California Department of Water Resources (DWR) annually. Based on historical allocations the range of available SWP water has been 5% to 100% over the last 25 years. Given the uncertainty of SWP deliveries and the fact that capacity in MWD and Calleguas' systems must be available in order for water to be wheeled to the City, a range of zero to full allocation of the City’s entitlement was selected for 2025 and 2030 projected supplies. Therefore, the projected available water supply in 2025 and 2030 for SWP water delivered by the State Water Interconnection Project is estimated to be 0-10,000 AFY.

**Potential Additional Future Supply**

This section describes any planned or proposed projects which may affect the water supply sources for the City.

- **Ocean Desalination:** At this time, Project 74070 Advanced Wastewater Treatment Plant Land Acquisition is listed in the City’s Adopted 2016-2022 CIP. The land acquisition is for the expansion of the City’s water supply for the construction of potential advanced water purification facilities for potable reuse and/or desalination. The project’s time schedule includes planning from 2016 through 2019.

According to the Ventura Water Supply Projects Draft Environmental Impact Report released March 6, 2019, if sufficient water is not available from the diversion of discharges to the SCRE, then the City may need to develop desalination facilities to meet 2035 water supply needs. This would be accomplished through either the expansion of the AWPF as a first option pending regulatory approvals, or, if this option is not approved or does not meet the City’s water supply needs, through construction of an ocean desalination facility. Since details of the ocean desalination project is in a preliminary stage, ocean desalination is identified as a potential additional future supply source.
CONCLUSION

The results of this Report indicate that, in the near term, the spread between the current water demand and the current water supply is very tight. If the continued drought condition persists, the supply could be less than the demand. The City’s customers will need to continue to conserve and/or pay penalties for overuse of the City’s water supply sources while the City secures new water supplies. This presents short-term challenges for the City as it continues to allocate water supply to development projects that will generate additional water demands. The City will continue to perform the following on an annual basis and publish the results in the annual Comprehensive Water Resources Report:

1. Provide total water consumption for the previous calendar year.
2. Recalculate the 3-year, 5-year and 10-year water consumption averages.
3. Update the water supply portfolio.
4. Update the existing land use data.
5. Evaluate all future development projects based on current supply and demand conditions.
6. 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.
7. Continue to develop water supply through demand side management, secure water rights, administer the Water Rights Dedication and Water Resource Net Zero Ordinance as approved in July 2016 and continue to integrate the new water supply sources into the City’s water supply portfolio.

The City has always worked to address long-term water demands with effective planning and development of additional future water supplies. As discussed earlier, the City currently has two proposed water supply projects in the planning stages: VenturaWaterPure and the State Water Interconnection Project, which together would ensure that the City has adequate supplies for future demand under various climatic conditions. In planning for these projects, the City must consider the uncertainty in both the demand projections and the supply projections. Current demand projections assume that the conservation that has occurred during the multi-year drought that began in 2013 will continue into the future. While the City continues to encourage conservation and the State has passed legislation to encourage “conservation as a way of life”, the City has limited control over the amount of water its citizens utilize. In Section 6 of the report, Table 6-3 summarizes the uncertainty and sensitivity to climate variations of each water supply source, which illustrate that the City’s water supplies are vulnerable to many factors outside of the City’s control. Consequently, water supply projections past 2021 are highly uncertain. Table 6-4 presents additional water supply scenarios to illustrate the vulnerability of the City’s existing water
supplies and how the water supplied by the proposed State Water Interconnection and VenturaWaterPure projects would be utilized to meet water demands in the future. Figure 6-2 illustrates the potential future water supply scenarios presented in Table 6-4.
# Table of Contents

1. **INTRODUCTION** .......................................................................................... 1-1  
   A. Background ................................................................................................. 1-1  
   B. Purpose of the Report .................................................................................. 1-1  
   C. Study Area .................................................................................................. 1-2  
   D. Demand Factors .......................................................................................... 1-3  
   E. Current Planning Data .................................................................................. 1-3  
   F. Glossary ....................................................................................................... 1-4  

2. **LAND USE** ................................................................................................... 2-1  
   A. Background .................................................................................................. 2-1  
   B. Existing Land Use ........................................................................................ 2-1  
   C. Future Land Use .......................................................................................... 2-6  
      1. Under Construction and Approved ............................................................... 2-6  
      2. Future Potential ....................................................................................... 2-6  

3. **WATER DEMANDS** ..................................................................................... 3-1  
   A. Existing Demand Condition .......................................................................... 3-1  
   B. Consumption and Usage Factors .................................................................. 3-2  
   C. Usage Factor Comparison ............................................................................ 3-5  
   D. Historical Water Consumption (Baseline Demand Condition) ..................... 3-7  
   E. Future Demand Projections (Approved Projects Only) .................................. 3-10  

4. **WATER SUPPLY** .......................................................................................... 4-1  
   A. Introduction .................................................................................................. 4-1  
   B. Normal (Non-Drought) Water Supply ............................................................ 4-3  
      1. Casitas Municipal Water District ................................................................. 4-3  
      2. Ventura River Surface Water Intake and Upper Ventura River Groundwater Basin ... 4-4  
      3. Mound Groundwater Basin .......................................................... 4-5  
      4. Oxnard Plain Groundwater Basin ............................................................. 4-6  
      5. Santa Paula Groundwater Basin .............................................................. 4-6  
      6. Recycled Water .................................................................................... 4-7  
   C. Current Water Supply .................................................................................. 4-9
<table>
<thead>
<tr>
<th>Section</th>
<th>Start Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Casitas Municipal Water District</td>
<td>4-9</td>
</tr>
<tr>
<td>2. Ventura River Surface Water Intake and Upper Ventura River Groundwater Basin</td>
<td>4-10</td>
</tr>
<tr>
<td>3. Mound Groundwater Basin</td>
<td>4-10</td>
</tr>
<tr>
<td>4. Oxnard Plain Groundwater Basin</td>
<td>4-10</td>
</tr>
<tr>
<td>5. Santa Paula Groundwater Basin</td>
<td>4-11</td>
</tr>
<tr>
<td>6. Recycled Water</td>
<td>4-11</td>
</tr>
<tr>
<td>D. Future Water Supply</td>
<td>4-13</td>
</tr>
<tr>
<td>1. Casitas Municipal Water District</td>
<td>4-13</td>
</tr>
<tr>
<td>2. Ventura River Surface Water Intake and Upper Ventura River Groundwater Basin</td>
<td>4-14</td>
</tr>
<tr>
<td>3. Mound Groundwater Basin</td>
<td>4-16</td>
</tr>
<tr>
<td>4. Oxnard Plain Groundwater Basin</td>
<td>4-17</td>
</tr>
<tr>
<td>5. Santa Paula Groundwater Basin</td>
<td>4-17</td>
</tr>
<tr>
<td>6. Recycled Water</td>
<td>4-18</td>
</tr>
<tr>
<td>7. VenturaWaterPure</td>
<td>4-18</td>
</tr>
<tr>
<td>8. State Water Project</td>
<td>4-20</td>
</tr>
<tr>
<td>E. Potential Additional Future Supply Sources</td>
<td>4-24</td>
</tr>
<tr>
<td>1. Ocean Desalination</td>
<td>4-24</td>
</tr>
<tr>
<td>5. PROGRAMS AND POLICIES</td>
<td>5-1</td>
</tr>
<tr>
<td>A. Introduction</td>
<td>5-1</td>
</tr>
<tr>
<td>1. Water Conservation Measures/Water Efficiency Plan</td>
<td>5-1</td>
</tr>
<tr>
<td>2. Water Shortage Task Force</td>
<td>5-3</td>
</tr>
<tr>
<td>3. Water Shortage Event Contingency Plan</td>
<td>5-3</td>
</tr>
<tr>
<td>Ordinance and Resolution</td>
<td>5-5</td>
</tr>
<tr>
<td>5. Water Commission</td>
<td>5-6</td>
</tr>
<tr>
<td>6. CONCLUSIONS &amp; DISCUSSION</td>
<td>6-1</td>
</tr>
<tr>
<td>A. Conclusions</td>
<td>6-1</td>
</tr>
<tr>
<td>B. Discussion</td>
<td>6-5</td>
</tr>
</tbody>
</table>
LIST OF TABLES

1-1 Summary of Previous Documents
2-1 Existing Land Uses per 2005 General Plan
2-2 Summary of “Built” Projects 2005-2012
2-3 Summary of Existing Land Use – December 2018
2-4 Summary of Approved and Under Construction Projects – December 2018
2-5 Summary of Predicted, Actual and Remaining Development – December 2018
3-1 Summary of Existing Water Consumption for CY 2018
3-2 Calculation of Raw Consumption Factors for CY 2012
3-3 Summary of Planning-Level Water Consumption Factors
3-4 Water Consumption Factor Comparison
3-5 Historical Annual Water Consumption
3-6 Total Estimated Demands for Under Construction and Approved Projects – as of December 2018
3-7 Projected Total Water Demands Including Under Construction and Approved Projects – Various Baselines
3-8 Projected Water Demand Growth
4-1 Summary of Normal Water Supply 2019
4-2 Summary of Current Water Supply 2019
4-3 Summary of Projected Future Water Supply from Existing and Potential New Sources
6-1 Demand vs. Supply Comparison
6-2 Comparison of Demand Projections
6-3 Supply Sources – Possibilities, Challenges, and Uncertainties
6-4 Potential Future Water Supply Scenarios

LIST OF FIGURES

1-1 City Overview
2-1 General Plan Land Use
2-2 Projects Approved and Under Construction – December 2018
3-1 Historical Annual Water Consumption
4-1 Supply Sources
4-2 VenturaWaterPure Timeline
6-1 Demand vs. Supply Comparison
6-2 Potential Future Water Supply Scenarios
1. INTRODUCTION

A. BACKGROUND

In the western United States, water resources are challenged by drought conditions, ecosystem habitat protection, and water quality concerns. The City of San Buenaventura (City) is no exception. Changing pressures on our local water sources have driven the need to create a more integrated approach to our water supply, demand, and infrastructure management. In 2010, a workshop on the City’s water supply issues was held. As a result of the workshop, City Council directed the City to provide a comprehensive evaluation of current and projected water supply needs. Following this recommendation, Ventura Water and the Community Development Department worked together in late 2012 and early 2013 to provide input and expertise on what development had taken place since the 2005 General Plan through 2012, the projects currently approved for development within the City and the potential for additional development through 2025.

In order to better determine the water demands from those developments, three existing documents were reviewed: 1) 2005 General Plan, 2005 General Plan Final Environmental Impact Report (FEIR) and 2007 Supplement, 2) 2010 Urban Water Management Plan (amended in 2011), and 3) 2011 Water Master Plan. The purpose of the review was to compare land use data (if applicable) and historical figures and future projections for water demand and water supply. A review of the three documents showed differences as each report was completed at a different time, with different data available, and for a specific purpose and/or audience. A summary of the purpose of the three reports and comparison for land use, water supply, and water demand is depicted in Table 1-1.

To reconcile the differences in the historical documents and establish a baseline of conditions in the City in 2012, Ventura Water and Michael Baker (formerly RBF Consulting) worked together to determine existing land use, existing demands, and normal supply. In order to look at future projections for land use, assumptions were made about future development (discussed further in the Land Use Section). In order to resolve conflicts identified in the previous reports related to future water supply / water demand projections, new demand factors were calculated based on calendar year 2012 data (refer to Water Demand Section D below). Thus, the first Comprehensive Water Resources Report was developed in June 2013.

B. PURPOSE OF REPORT

In 2013, the Comprehensive Water Resources Report (CWRR) was developed as an annual water management tool. The CWRR is intended to be a tool in the development review process as it
p pertains to water supply and demand. The CWRR provides an annual look at the City’s water demand trends, current water demands, demand projections, and the current and future supply picture. The purpose of the CWRRs is to track proposed development projects, consistently calculate the anticipated increase in water demand associated with each proposed development project, and then evaluate the impact on the current water supply. The CWRRs specifically focus on water demand of approved (entitled) projects and on near-term demand changes. The annual CWRRs are an important tool that the City utilizes to update the City’s annual projected water supply and demand outlook. The 2013 CWRR was approved by City Council in June 2013.

The 2013 CWRR was the first annual version of this report and included historical information related to the genesis of this report and previous studies prepared. The subsequent 2014 to 2017 CWRRs were prepared as supplements to the previous year’s document and approved by City Council. Background information provided in the 2013 CWRR that did not change was not included in the 2014 to 2017 CWRRs. Beginning with the 2018 CWRR, the CWRR will be a stand-alone document that will include relevant information from the original 2013 CWRR, updates to existing land use information, water demand data based on the previous calendar year’s data, and 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 projections will also be updated in order to capture the current water use patterns within the City.

C. STUDY AREA

The City of San Buenaventura is located 62 miles north of Los Angeles and 30 miles south of Santa Barbara along the California coastline. The City is located within the County of Ventura, and bounded by the City of Oxnard to the south, by unincorporated Ventura County to the east and north, and by the Pacific Ocean to the west. The northwest portion of the City is bounded by the Ventura River, while the southern portion is bounded by the Santa Clara River. The Ventura Freeway (101) bisects the City in the north-south direction, while the Santa Paula Freeway (126) runs east to west through the center of the City. The Ojai Freeway (33) runs along the northwestern edge of the City. The City currently occupies an estimated 21 square miles and has an estimated population of 109,000 persons. Figure 1-1 identifies the City of San Buenaventura boundary, the Sphere of Influence and General Plan boundary.

At this time Ventura Water provides potable water service to a population of approximately 113,500 persons and has approximately 32,000 service connections. The City’s existing water service area includes all portions within the City limits, as well as portions of unincorporated Ventura County that meet the City’s policy for water connections outside City limits (Municipal Code Section
Ventura Water also operates the Saticoy Country Club (SCC) water system, which consists of residences and country club facilities that are located east of the City. They have their own stand-alone system, which includes three groundwater wells, a booster pump station and two storage tanks. The ownership responsibility for the system is shared between the City and SCC (1/3 and 2/3, respectively). The SCC system has a separate Domestic Water Supply Permit from the California Department of Public Health.

D. DEMAND FACTORS

Demand factors are used to calculate the future water demand projections. Demand factors are either land use based (per area (acre/ksf) or per dwelling unit) or population based (per capita). Demand factors are typically derived from actual water consumption data, and a safety factor is applied for planning purposes.

City-specific water demand factors were calculated in the 2013 CWRR. For a full discussion, refer to Section 3 – Water Demands. These demand factors have been used in the 2013 CWRRs and all subsequent CWRRs. It should be noted that the water demand factors calculated in the 2013 CWRR will not be updated on an annual basis. The water demand factors will be re-visited every 10 years, unless there is a significant change in the year-over-year annual demand (quantified as a 30% in two-year period).

E. CURRENT PLANNING DATA

The Community Development Department maintains a database of all projects that are in the planning, design or construction phase. These projects are known as the “Pending Projects.” The pending projects database is updated periodically as new projects are proposed or existing projects are modified.

The Department provided actual development data (“Built” projects) for the year ending December 2018, and data on all projects that are under construction or have received all planning approvals (“Approved” projects) for development, as of December 31, 2018. 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, 2018 were not considered in the future water demand projections for this Report.
F. GLOSSARY

*Drought condition* – Hydrologic conditions during a defined period, greater than one dry year, when precipitation and runoff are much less than average. (Department of Water Resources) Further discussion of drought is included in Section 5 of the report.

*Normal Supply* – A normal (non-drought) supply is defined by the City’s 2015 Water Shortage Event Contingency Plan (WSECP). When the stages of the 2015 WSECP are not activated, the City is experiencing normal supply conditions. In addition, under normal supply conditions, it is assumed that City facilities are fully functioning and not restricted for operational reasons.

*Sustainable yield (safe yield)* – The maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result. (Sustainable Groundwater Management Act (SGMA))

*Water Shortage Event* – A water shortage event can be a single occurrence as short as twenty-four hours to a multi-year weather condition. Other events, besides drought, that could trigger a water shortage event include an earthquake, water system failures, fire, contamination, regional power outage, State restrictions, or other causes. (WSECP)

*Water Shortage Stages* – Per the WSECP, the six water shortage stages may be activated when the Annual Supply Projection (Table 4-2 of the most current CWRR) is below the Normal Year Supply Projection (Table 4-1 of the 2013 CWRR) at varying trigger levels. The WSECP noted that the baseline supply value will not change through the duration of the event; thus, Table 4-1 of the 2013 CWRR is the baseline supply value since the City has remained in a Stage 3 since 2014.
### TABLE 1-1: SUMMARY OF PREVIOUS DOCUMENTS

|----------|-------|-------|-------|-------|-------|-------|------------------------|
| 2005 General Plan, GP FEIR and 2007 Supplement | 21,566 | 26,300 | 28,262 | 28,262 | 28,262 | 28,262 | Table 1 of the 2004 Biennial Water Supply Report  
- Based on actual water production data thru 2003  
- Future projections based on assumptions and limitations for each supply source known at the time (2004)  
- [1] Figure includes 1,129 AFY for raw water and oil operation use  
- Figures do not include recycled water |
| 2010 Urban Water Management Plan | n/a | n/a | 20,600 | 22,000 | 24,600 | 24,700 | Table 3-2 of the 2010 UWMP  
- Water production data for 2010 is based on annual average data from 2000 - 2009 as presented in Table V-14 of the 2011 WMP  
- Future projections based on assumptions and limitations for each supply source known at the time (2011)  
- Figures do not include raw water and oil operation use  
- Figures include 700 AFY of recycled water annually |
| 2011 Water Master Plan | n/a | n/a | n/a | n/a | n/a | 18,760 - 25,800 | Tables ES-2, V-1, V-2, V-7, V-10, V-13 and V-14 of 2011 WMP  
- Based on actual water production data through 2010  
- Historical population based on California Department of Finance Table E-4 Population Estimates for Cities, Counties and the State (2000 Benchmark)  
- Growth rate in City = 0.88%, outside City = 0.1258% in connections  
- Water Use Factor = 168 gpcd = 0.188 AFY/capita |

### Total Water Demand / Consumption (AFY)

|----------|-------|-------|-------|-------|-------|-------|------------------------|
- Based on actual water consumption data thru 2003  
- Historical population based on 2000 U.S. Census  
- Growth rate in City = 0.9%, outside City = 0.6%  
- Water Use Factor = 0.179 AFY/capita |

2010 Urban Water Management Plan | n/a | 20,808 | 17,351 | 22,286 | 23,256 | 24,270 | Table 2-5 of the 2010 UWMP  
- Based on actual water consumption data through 2010  
- Historical population based on California Department of Finance Table E-4 Population Estimates for Cities, Counties and the State (2000 Benchmark)  
- Growth rate in City = 0.88%, outside City = 0.1258% in connections  
- Water Use Factor = 168 gpcd = 0.188 AFY/capita |

2011 Water Master Plan | n/a | 16,190 | 17,896 | n/a | n/a | 22,708 | Table IV-5 and Figure IV-2 of the 2011 WMP  
- Based on actual billing records from 2004-2005.  
- Near-term projections (allocated to 2010) based on actual billing data from 2004-2005, calculated demand factors from the same period applied to the 2006 Pending Projects list.  
- Long-term projections (allocated to Year 2025) based on applying the calculated demand factors to the remaining developable land as identified in the 2005 GP, excluding the land accounted for in the 2006 Pending Projects list. |
2. LAND USE

A. BACKGROUND

In order to determine the existing land use make-up within the City's water service area as of year-end 2012 for the 2013 CWRR, the land use data published in the 2005 General Plan was used as a starting point. Table 2-1 provides a summary of the development as of year-end 2004 within the General Plan land use categories in dwelling-unit count and square footage. Figure 2-1 depicts the land use designations throughout the City as identified in the 2005 General Plan. Table 2-2 summarizes data for all projects built from 2005-2012, which breaks land uses down into non-residential categories and residential categories. The City Planning Department provided a listing of all projects “built” from 2005-2012, including back-up data. Minor modifications and adjustments were made based on supplemental data provided by Ventura Water staff. In addition, square footages for parking garages were eliminated from the list since the land use does not consume water.

B. EXISTING LAND USE

Table 2-3, which has been updated on an annual basis since 2013, provides a summarized total of the existing land use within the City service area. For the purposes of this report, the existing land use picture is considered the year-end of 2018. In order to determine the existing land use make-up within the City's water service area as of year-end 2018, all known development projects constructed and utilizing water within Calendar Year 2018 were added to the land use data published in the 2018 CWRR for the year-end 2017. 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>
<thead>
<tr>
<th>Planning Designation</th>
<th>Allowed Density (du/acre)</th>
<th>Existing Development as of 2004</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Single Family (Units)</td>
<td>Multi Family (Units)</td>
<td>Non-Residential (SF)</td>
<td></td>
</tr>
<tr>
<td>Neighborhood Low</td>
<td>0-8</td>
<td>19,425</td>
<td>3,335</td>
<td>49,386</td>
<td></td>
</tr>
<tr>
<td>Neighborhood Medium</td>
<td>9-20</td>
<td>1,163</td>
<td>8,965</td>
<td>149,513</td>
<td></td>
</tr>
<tr>
<td>Neighborhood High</td>
<td>21-54</td>
<td>814</td>
<td>2,468</td>
<td>194,143</td>
<td></td>
</tr>
<tr>
<td>Commerce</td>
<td></td>
<td>257</td>
<td>490</td>
<td>4,995,248</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td>29</td>
<td>31</td>
<td>8,299,840</td>
<td></td>
</tr>
<tr>
<td>Public and Institutional</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>54,422</td>
<td></td>
</tr>
<tr>
<td>Park and Open Space</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>15,491</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>19,550</td>
<td></td>
</tr>
<tr>
<td>Downtown Specific Plan</td>
<td>21-54</td>
<td>332</td>
<td>1,543</td>
<td>1,795,401</td>
<td></td>
</tr>
<tr>
<td>Harbor District</td>
<td>0</td>
<td>310</td>
<td>350,160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>22,034</td>
<td>17,142</td>
<td>15,923,154</td>
<td></td>
</tr>
</tbody>
</table>

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

Note: Areas prone to flooding are shown on Figure 7-1 in Chapter 7.

Neighborhood
Low (up to 8 du/ac)  Commerce  Agriculture  Corridors, Neighborhood Centers (NC)
Medium (9-20 du/ac) Industry  Parks and Open Space Districts
High (21-54 du/ac) Public and Institutional Specific Plan Area

This map is a product of the City of San Buenaventura, California. Although reasonable efforts have been made to ensure the accuracy of this map, the City of San Buenaventura cannot guarantee its accuracy.
### Table 2-2
Summary of "Built" Projects 2005-2012

<table>
<thead>
<tr>
<th>Non-Residential</th>
<th>Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>RETAIL/OFFICE (SF)</td>
<td>INDUSTRIAL (SF)</td>
</tr>
<tr>
<td>DISTRICTS</td>
<td></td>
</tr>
<tr>
<td>Upper North Avenue</td>
<td>0</td>
</tr>
<tr>
<td>North Avenue</td>
<td>0</td>
</tr>
<tr>
<td>Downtown Specific Plan</td>
<td>55,891</td>
</tr>
<tr>
<td>Pacific View Mall</td>
<td>14,824</td>
</tr>
<tr>
<td>Harbor</td>
<td>201</td>
</tr>
<tr>
<td>Arundel</td>
<td>108,413</td>
</tr>
<tr>
<td>North Bank</td>
<td>97,774</td>
</tr>
<tr>
<td>Montecito</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>438</td>
</tr>
<tr>
<td>Subtotal (Districts)</td>
<td>274,340</td>
</tr>
<tr>
<td>CORRIDORS</td>
<td></td>
</tr>
<tr>
<td>Ventura Avenue</td>
<td>7,086</td>
</tr>
<tr>
<td>Main Street</td>
<td>2,072</td>
</tr>
<tr>
<td>Thompson Boulevard</td>
<td>18,784</td>
</tr>
<tr>
<td>Loma Vista</td>
<td>19,541</td>
</tr>
<tr>
<td>Telegraph Road</td>
<td>5,503</td>
</tr>
<tr>
<td>Victoria Avenue</td>
<td>64,775</td>
</tr>
<tr>
<td>Johnson Drive</td>
<td>840</td>
</tr>
<tr>
<td>Saticoy Road</td>
<td>2,816</td>
</tr>
<tr>
<td>Subtotal (Corridors)</td>
<td>121,417</td>
</tr>
<tr>
<td>SPHERE OF INFLUENCE(SEO/Other Infill/Neighborhood Centers)</td>
<td></td>
</tr>
<tr>
<td>101/126 Agriculture</td>
<td>0</td>
</tr>
<tr>
<td>Wells/Saticoy</td>
<td>0</td>
</tr>
<tr>
<td>Pierpont</td>
<td>0</td>
</tr>
<tr>
<td>Other Neighborhood Centers (includes Seaward/Alessandro+College Day+Gateway Phase+Victoria Plaza+Biltin+Kretzali+Telegraph+Petit+Telephone+Telephone)</td>
<td>27,032</td>
</tr>
<tr>
<td>Second Units</td>
<td>0</td>
</tr>
<tr>
<td>Underutilized</td>
<td>0</td>
</tr>
<tr>
<td>Vacant</td>
<td>0</td>
</tr>
<tr>
<td>Subtotal (SEO/Other Infill/NC)</td>
<td>27,032</td>
</tr>
<tr>
<td>PLANNING COMMUNITIES (Not Included within District/Corridor/Center-above)</td>
<td></td>
</tr>
<tr>
<td>Downtown</td>
<td>0</td>
</tr>
<tr>
<td>Ventura Ave/Westside</td>
<td>0</td>
</tr>
<tr>
<td>Midtown</td>
<td>0</td>
</tr>
<tr>
<td>College (Telegraph/Loma Vista)</td>
<td>10,931</td>
</tr>
<tr>
<td>Telephone Road Corridor</td>
<td>0</td>
</tr>
<tr>
<td>Montecito/Victoria</td>
<td>56,933</td>
</tr>
<tr>
<td>Saticoy/East End</td>
<td>6,320</td>
</tr>
<tr>
<td>Arundel</td>
<td>0</td>
</tr>
<tr>
<td>Chivas</td>
<td>658</td>
</tr>
<tr>
<td>Pierpoint</td>
<td>26,436</td>
</tr>
<tr>
<td>Sierra</td>
<td>3,744</td>
</tr>
<tr>
<td>Juanamaria</td>
<td>6,89</td>
</tr>
<tr>
<td>Bollard</td>
<td>1,499</td>
</tr>
<tr>
<td>Thriss</td>
<td>13,370</td>
</tr>
<tr>
<td>Wells</td>
<td>87,618</td>
</tr>
<tr>
<td>Westside</td>
<td>8,316</td>
</tr>
<tr>
<td>Subtotal (Planning Communities)</td>
<td>217,414</td>
</tr>
<tr>
<td>TOTAL</td>
<td>640,203</td>
</tr>
</tbody>
</table>

Source: Development data provided by City 02/14/2013.
Note: Figures include the built projects only.
### Table 2-3
Summary of Existing Land Use - December 2018

<table>
<thead>
<tr>
<th></th>
<th>Residential Single-Family (units)</th>
<th>Residential Multi-Family (units)</th>
<th>Non-Residential (sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing (as of 2005 General Plan)</td>
<td>22,034</td>
<td>17,142</td>
<td>15,923,154</td>
</tr>
<tr>
<td>Constructed (Built Projects 2005 - 2012)</td>
<td>543</td>
<td>1,369</td>
<td>1,394,442</td>
</tr>
<tr>
<td>Constructed (Built Projects 2013)</td>
<td>28</td>
<td>0</td>
<td>4,356</td>
</tr>
<tr>
<td>Constructed (Built Projects 2014)</td>
<td>0</td>
<td>0</td>
<td>147,060</td>
</tr>
<tr>
<td>Constructed (Built Projects 2015)</td>
<td>59</td>
<td>114</td>
<td>0.00</td>
</tr>
<tr>
<td>Constructed (Built Projects 2016)</td>
<td>0</td>
<td>40</td>
<td>7,360</td>
</tr>
<tr>
<td>Constructed (Built Projects 2017)</td>
<td>9</td>
<td>153</td>
<td>29,637</td>
</tr>
<tr>
<td>Constructed (Built Projects 2018)</td>
<td>34</td>
<td>154</td>
<td>394,783</td>
</tr>
<tr>
<td><strong>Total Existing Land Use (through 2018)</strong></td>
<td><strong>22,707</strong></td>
<td><strong>18,972</strong></td>
<td><strong>17,900,792</strong></td>
</tr>
</tbody>
</table>

1. Per Table 2-1
2. Per Table 2-2
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)
5. Per data provided by Ventura Water, Built Projects part of CY 2015 water demand:
   - PROJ-5211 Citrus Apartments; 54 Multi-Family Residential Units
   - PROJ-6355 Orchard Collection; 59 Single-Family and 60 Multi-Family Residential Units
6. Per data provided by Ventura Water, Built Projects part of CY 2016 water demand:
   - PROJ-7286 Union Bank; 4,860 SF
   - PROJ-6187 Castillo Del Sol; 40 Affordable Housing Units and 2,500 SF Commercial
7. Per data provided by Ventura Water, Built Projects part of CY 2017 water demand:
   - PROJ-03743 Cannery Row LLC; Mixed Use - 2,156 SF and 78 Multi-Family Residential Units
   - PROJ-01857 Hearthside - Jenven Village; 51 Condominiums
   - PROJ-7215 CMH Parking Structure; 1,399 SF Retail Liner
   - PROJ-7290 Santa Clara Courts; 24 Condominiums
   - PROJ-6098 La Barranca; 9 Single-Family Units
   - PROJ-10123 New Volkswagen Dealership; 21,975 SF
   - PROJ-8794 Uncle Don’s Liquor; 725 SF Addition
   - PROJ-8641 Kia Addition; 3,382 SF
   - PROJ-10085 Kellogg Park Zone Change
8. Per data provided by Ventura Water, Built Projects as part of CY 2018 water demand:
   - PROJ-1678 CMH New Hospital; 320,000 SF New and 230 Beds
   - PROJ-2008 Island View Apartments; 154 Apartments
   - PROJ-7213 398 S. Ash St. – Trailer Hotel; New Airstream Trailer Park (34 Units)
   - PROJ-10278 Subaru Dealership; Addition of 2,783 SF to Existing Dealership
   - PROJ-8479 Kaiser NWC Market and Valentine; New 72,000 SF Medical Center

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.
C. FUTURE LAND USE

The City maintains a database of projects that are in the City’s planning process. The database includes all projects 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 staff. The Under Construction and Approved Projects as of December 31, 2018 are shown on Table 2-4. Table 2-4, updated on an annual basis, 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. Figure 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 2005-2018, 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 by the density.
<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Type</th>
<th>Project Name</th>
<th>Project Status</th>
<th>Description of Project</th>
<th>Area (ac)</th>
<th>Units</th>
<th>Total (GPD)</th>
<th>Total (AFY)</th>
<th>Institutional (SI)</th>
<th>Office (SI)</th>
<th>Total Daily Demand (GPD)</th>
<th>Total Annual Demand (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRO-10060</td>
<td>Mixed Use</td>
<td>VILLA SAN Clemente (Staun)</td>
<td>Under Construction</td>
<td>Mixed Use - Condominiums/Commercial</td>
<td>0.554</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3.972</td>
<td>4.85</td>
</tr>
<tr>
<td>PRO-10576</td>
<td>Mixed Use</td>
<td>ANASTASIA - HARBOR &amp; SEAWARD</td>
<td>All Planning Approvals</td>
<td>Mixed Use - Commercial/Residential</td>
<td>20,230</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>138</td>
<td>39,681</td>
</tr>
<tr>
<td>PRO-10735</td>
<td>Mixed Use</td>
<td>THOMPSON VILLAGE - CORC (LOC Ventures)</td>
<td>All Planning Approvals</td>
<td>Mixed Use - Condominiums/Commercial</td>
<td>1,573</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>29</td>
<td>7,280</td>
</tr>
<tr>
<td>PRO-26808</td>
<td>Mixed Use</td>
<td>WESTSIDE VILLAS (Previously PROJ-00222)</td>
<td>All Planning Approvals</td>
<td>Mixed Use - Condominiums/Commercial</td>
<td>1,573</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>40</td>
<td>10,417</td>
</tr>
<tr>
<td>PRO-10517</td>
<td>Industrial</td>
<td>FPA LAND DEV/VICTORIA CORP C</td>
<td>All Planning Approvals</td>
<td>7 industrial office buildings</td>
<td>150</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>42,131</td>
<td>47.19</td>
</tr>
<tr>
<td>PRO-10445</td>
<td>Residential</td>
<td>UC HANSEN TRUST SP</td>
<td>Under Construction</td>
<td>NO</td>
<td>131</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>131</td>
<td>59,973</td>
</tr>
<tr>
<td>PRO-02820</td>
<td>Residential</td>
<td>WESTWOOD/PARKLANDS</td>
<td>All Planning Approvals</td>
<td>NO</td>
<td>216</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>216</td>
<td>107,420</td>
</tr>
<tr>
<td>PRO-02864</td>
<td>Commercial</td>
<td>VINO</td>
<td>All Planning Approvals</td>
<td>NO</td>
<td>6,400</td>
<td>0</td>
<td>6,400</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,606</td>
</tr>
<tr>
<td>PRO-02865</td>
<td>Residential</td>
<td>MATLIA</td>
<td>Under Construction</td>
<td>NO</td>
<td>28 Condominiums</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7,050</td>
</tr>
<tr>
<td>PRO-04149</td>
<td>Residential</td>
<td>SOLARIA HEIGHTS (Previously Westside Renaissance)</td>
<td>Under Construction</td>
<td>NO</td>
<td>125 Single Family Residence, 36 Condominiums, 2.55 AC Parks</td>
<td>125</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>120</td>
</tr>
<tr>
<td>PRO-04137</td>
<td>Residential</td>
<td>MATLIA INVESTMENT GROUP (11 S. Ash)</td>
<td>Under Construction</td>
<td>NO</td>
<td>15 Condominiums</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>PRO-6287</td>
<td>Mixed Use</td>
<td>SIZEMAN-RINK Amendment</td>
<td>Under Construction</td>
<td>NO</td>
<td>27 Apartments approved (116 apartments, 110 attached homes)</td>
<td>21,300</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>320</td>
</tr>
<tr>
<td>PRO-04905</td>
<td>Residential</td>
<td>CHAPMAN, MIKE</td>
<td>All Planning Approvals</td>
<td>NO</td>
<td>77 Apartments</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>PRO-1126</td>
<td>Residential</td>
<td>HENLOD APARTMENTS</td>
<td>All Planning Approvals</td>
<td>NO</td>
<td>23 Apartments</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>PRO-12259</td>
<td>Mixed Use</td>
<td>LOGUE</td>
<td>All Planning Approvals</td>
<td>NO</td>
<td>Mixed Use - 125 Condominium Units &amp; 10,000 sf of commercial</td>
<td>10,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>125</td>
</tr>
<tr>
<td>PRO-56145</td>
<td>Commercial</td>
<td>BARRIOT RESIDENCE INN</td>
<td>Under Construction</td>
<td>NO</td>
<td>320 Single Family Residence</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>320</td>
</tr>
<tr>
<td>PRO-41561</td>
<td>Residential</td>
<td>EAST VILLAGE RESIDENTIAL - CEDC Apartments</td>
<td>Under Construction</td>
<td>NO</td>
<td>50 Low Income Apartments</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>PRO-42227</td>
<td>Residential</td>
<td>PARKLANDS APARTMENTS</td>
<td>Under Construction</td>
<td>NO</td>
<td>173 Apartments with Community Building</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>173</td>
</tr>
<tr>
<td>PRO-41164</td>
<td>Residential</td>
<td>ENCLAVE AT NORTHBANK - WATT COMMUNITIES</td>
<td>Under Construction</td>
<td>NO</td>
<td>Density Bonus Concessions for 91 residential units consisting of 77 single-family units and 14 multi-family (7 Duplexes)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>77</td>
</tr>
<tr>
<td>PRO-14533</td>
<td>Residential</td>
<td>SANTA CLARA G1TS - 1224 &amp; 1232 E. Santa Clara St.</td>
<td>Under Construction</td>
<td>NO</td>
<td>8 apartments</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>PRO-15273</td>
<td>Mixed Use</td>
<td>500 S MARK CT - ANASTASIA/ASBELL (formerly Renaissance Holdings)</td>
<td>All Planning Approvals</td>
<td>NO</td>
<td>Mixed Use - 30 Condominium Units &amp; 2000 sq ft of commercial/retail</td>
<td>3,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>PRO-74472</td>
<td>Mixed Use</td>
<td>BEST WESTERN - 708 E THOMPSON BL - REMODEL</td>
<td>Under Construction</td>
<td>NO</td>
<td>555</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>147</td>
</tr>
<tr>
<td>PRO-04499</td>
<td>Commercial</td>
<td>PACIFIC MIDWEST DEV</td>
<td>All Planning Approvals</td>
<td>NO</td>
<td>4 Commercial buildings</td>
<td>3,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PRO-05815</td>
<td>Institutional</td>
<td>VENTURA BOTANICAL GARDENS</td>
<td>Under Construction</td>
<td>NO</td>
<td>3 Botanical Gardens</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PRO-06950</td>
<td>Mixed Use</td>
<td>300 S MARK ST - REDEVELOPMENT</td>
<td>All Planning Approvals</td>
<td>NO</td>
<td>Mixed Use - 30 Condominium Units</td>
<td>1,730</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>140</td>
</tr>
<tr>
<td>PRO-7166</td>
<td>Mixed Use</td>
<td>HARLING APARTMENTS</td>
<td>Under Construction</td>
<td>NO</td>
<td>Mixed Use - 15 Apartments</td>
<td>2,100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>PRO-70455</td>
<td>Residential</td>
<td>WESTVIEW VILLAGE - Housing Authority</td>
<td>Under Construction</td>
<td>NO</td>
<td>Redevelopment of 47 public housing apartments and 7 new apartments</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>140</td>
</tr>
<tr>
<td>PRO-71068</td>
<td>Residential</td>
<td>VENTURA BAY CONDOMINIUMS</td>
<td>All Planning Approvals</td>
<td>NO</td>
<td>684 Apartments</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>55</td>
</tr>
<tr>
<td>PRO-71830</td>
<td>Commercial</td>
<td>HOLIDAY INEXPRESS &amp; SUITES HOTEL - 1080 NAVIGATOR WAY</td>
<td>Under Construction</td>
<td>NO</td>
<td>70 Room addition to existing Holiday Inn Express &amp; Suites</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PRO-10172</td>
<td>Commercial</td>
<td>VENTURA OPTOMETRY</td>
<td>Under Construction</td>
<td>NO</td>
<td>8,100 SF medical office building</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PRO-69866</td>
<td>Residential</td>
<td>VENTURA VICTORIA CORPORATION</td>
<td>Under Construction</td>
<td>NO</td>
<td>1,410 SF, one-story industrial office building</td>
<td>0</td>
<td>0</td>
<td>43,470</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2-4 Summary of Approved and Under Construction Projects - as of December 2018
### Summary of Approved and Under Construction Projects - as of December 2018

| 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 (Units) | Hotel (Bedrooms) | Park / Rng. Area (ac) | Single-Family (Units) | Multi-Family (Units) | Total (Units) | Total Daily Demand (GPD) | Total Annual Demand (MPD) |
|------------|--------------|--------------|----------------|---------------------------------------------------|-------------------------|-------------------|-------------|----------------|-------------------|---------------|-------------|-------------------|----------------------|---------------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| PROJ-10654 | Commercial   | SOUTHERN SELF STORAGE | All Planning Approvals | NO | New office building. | 914 | 0 | 0 | 0 | 0 | 914 | 0 | 0 | 0 | 242 | 3.07 |
| PROJ-4677  | Residential  | WESTSIDE RENAISSANCE | All Planning Approvals | YES | 50 Affordable senior apartments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 12,500 | 14.00 |
| PROJ-10410 | Residential  | RANCH VERDE | Under Construction | NO | 24 Farmworker housing apartment units | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 24 | 6,000 | 6.72 |
| PROJ-10623 | Residential  | RIVERSIDE ST MULTI-FAMILY | Under Construction | YES | New multi-family: 6 buildings, 23 units: 100% affordable | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 23 | 5,750 | 6.44 |
| PROJ-10225 | Mixed Use    | DEANZA COURTS, 1685 N. VENTURA AVE (Previously New Urban Ventures) | All Planning Approvals | YES | Modification of an approved project: 40 residential units and 1,779 SF of retail within three buildings | 1,779 | 0 | 0 | 0 | 0 | 1,779 | 0 | 0 | 80 | 80 | 20,471 | 22.93 |
| PROJ-62791 | Residential  | NORTHBANK - VENICE DALY | All Planning Approvals | NO | New 3-story mixed use consisting of 43 apartments: 4,200 SF total | 1,200 | 0 | 0 | 0 | 0 | 1,200 | 0 | 0 | 43 | 43 | 11,068 | 12.40 |
| PROJ-10910 | Commercial   | VICTORIA & MOON RETAIL CENTER | Under Construction | NO | Demolition of existing structures (approx. 9,100 SF) and development of a 1,840 SF coffee kiosk and 6,500 SF building | 8,340 | 0 | 0 | 0 | 0 | 8,340 | 0 | 0 | 0 | 0 | 2,210 | 2.48 |
| PROJ-10666 | Commercial   | IVYERRA SHOPPING CENTER | Under Construction | NO | New 5,000 SF expansion, creation of new retail and commercial buildings and 5,000 SF Verizon | 13,377 | 0 | 0 | 0 | 0 | 13,377 | 0 | 0 | 0 | 0 | 3,534 | 3.98 |
| PROJ-10785 | Mixed Use    | 3811 OLIVAS PARK DR | All Planning Approvals | NO | New 23,501 SF industrial/commercial building | 23,501 | 0 | 0 | 0 | 0 | 23,501 | 0 | 0 | 0 | 0 | 6,228 | 6.98 |
| PROJ-8428  | Mixed Use    | 11101 CARDS ST - GISLER RANCH MIXED USE | All Planning Approvals | YES | New multi-family: 6 buildings, 23 units: 100% affordable | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,366 | 1.56 |
| PROJ-6018  | Mixed Use    | WORLD OIL - 1571 E. MAIN ST | All Planning Approvals | YES | New 3-story mixed use consisting of 43 apartments: 4,200 SF total | 1,200 | 0 | 0 | 0 | 0 | 1,200 | 0 | 0 | 43 | 43 | 11,068 | 12.40 |
| PROJ-8427  | Residential  | 11156-11172 CITRUS DR - CITRUS II | Under Construction | NO | New 3-story mixed use consisting of 43 apartments: 4,200 SF total | 1,200 | 0 | 0 | 0 | 0 | 1,200 | 0 | 0 | 43 | 43 | 11,068 | 12.40 |
| PROJ-11233 | Commercial   | 1324 N. VENTURA AVE - 6 WAY MEAT MARKETING | All Planning Approvals | YES | New office 3,000 s.f. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,000 | 1.10 |
| PROJ-11236 | Commercial   | 1500 E. MAIN ST - MOBILE GAS | Under Construction | NO | New 3,000 s.f. office building | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,000 | 1.10 |
| PROJ-10752 | Commercial   | 324 E. MAIN ST - IRON AND RESIN FACADE CHG AND ADDITION | All Planning Approvals | YES | Tenant improvements to divide into 3 spaces; addition of 3 shipping containers to be used for coffee shop, covered parking area and private commercial storage, 600 s.f. | 800 | 0 | 0 | 0 | 0 | 800 | 0 | 0 | 0 | 0 | 212 | 0.24 |
| PROJ-11108 | Commercial   | 2712 PALM DR - SUEDA TILE | All Planning Approvals | NO | New 5,000 s.f. addition to existing commercial structure. | 5,000 | 0 | 0 | 0 | 0 | 5,000 | 0 | 0 | 0 | 0 | 1,325 | 1.40 |
| PROJ-10694 | Commercial   | 4800 MARINEL ST - STAR OF CA | All Planning Approvals | NO | New office building: 5,500 s.f. | 5,500 | 0 | 0 | 0 | 0 | 5,500 | 0 | 0 | 0 | 0 | 2,693 | 2.95 |
| PROJ-8611 | Mixed Use    | RAVIVELLO HOLDINGS - NORTHBANK AND JOHNSTON | All Planning Approvals | NO | 3-story office building: 3,000 apartment units and 5,000 s.f. commercial and 5,000 s.f. clubhouse | 10,020 | 0 | 0 | 0 | 0 | 10,020 | 0 | 0 | 0 | 0 | 79,150 | 88.06 |
| PROJ-10578 | Commercial   | DOWNTOWN SAN DIEGO TIE | All Planning Approvals | YES | New 3-story mixed use apartment development, 20,000 s.f. parking and public open space. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 547 | 0.61 |
| PROJ-11665 | Residential  | THOMPSONS AND KALORAMA - 918 E. THOMPSON BLVD | All Planning Approvals | YES | New 3-story 45 residential unit apartment building | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,250 | 12.60 |
| PROJ-10584 | Residential  | 909 THOMPSONS BLVD - THOMPSONS CRUIZ | All Planning Approvals | YES | New 3-story 45 residential unit apartment building | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 | 3,000 | 3.36 |

**Total: 152,622 117,366 158,984 43,470 18,834 491,276 0 125 7.97 661 2,756 3,417 1,079,096 1,346**

[1] Not part of CY 2019 water conservation (connected to City water, no established water usage).
[3] Projects previously approved and revised.
[4] PROJ-10654 was the affordable component of the project and consisted of 24 farmworker apartments. It is now moving forward as PROJ-10410.
[5] Total Annual Demand Value as reported in the water supply system planning document.

**Table 2-4 Summary of Approved and Under Construction Projects - as of December 2018**

**Non-Residential**

- Commercial: 152,622 117,366 158,984 43,470 18,834 491,276 0 125 7.97 661 2,756 3,417 1,079,096 1,346

**Residential**

- Total within Casitas Boundary: 32,492 28,895 26,462 0 0 3,089 120 1,360 1,480 400,216 582

**Total within Casitas Boundary: 182,114 146,261 185,446 44,432 22,224 531,492 0 135 8.42 701 3,637 3,828 1,480,312 1,928

**LAND USE**

2019 COMPREHENSIVE WATER RESOURCES REPORT

FINAL DRAFT REPORT: May 20, 2019
Table 2-5
Summary of Predicted, Actual and Remaining Development

<table>
<thead>
<tr>
<th></th>
<th>Residential Development (units)</th>
<th>Non-Residential</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Retail (sf)</td>
<td>Office (sf)</td>
<td>Industrial (sf)</td>
<td>Hotel (sf)</td>
<td>Total (sf)</td>
</tr>
<tr>
<td>2005 General Plan Prediction [1]</td>
<td>8,318</td>
<td>1,241,377</td>
<td>1,213,214</td>
<td>2,235,133</td>
<td>530,000</td>
<td>5,219,724</td>
</tr>
<tr>
<td>Actual Development (Built 2005-2012)[2]</td>
<td>1,912</td>
<td>320,102</td>
<td>320,102</td>
<td>754,239</td>
<td>0</td>
<td>1,394,442</td>
</tr>
<tr>
<td>Constructed (Built 2013) [4]</td>
<td>28</td>
<td>4,356</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4,356</td>
</tr>
<tr>
<td>Constructed (Built 2014) [4]</td>
<td>0</td>
<td>0</td>
<td>147,060</td>
<td>0</td>
<td>0</td>
<td>147,060</td>
</tr>
<tr>
<td>Constructed (Built 2015) [4]</td>
<td>173</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Constructed (Built 2016) [4]</td>
<td>40</td>
<td>0</td>
<td>7,360</td>
<td>0</td>
<td>0</td>
<td>7,360</td>
</tr>
<tr>
<td>Constructed (Built 2017) [4]</td>
<td>162</td>
<td>28,238</td>
<td>0</td>
<td>0</td>
<td>1,399</td>
<td>29,637</td>
</tr>
<tr>
<td>Constructed (Built 2018) [4]</td>
<td>188</td>
<td>74,783</td>
<td>0</td>
<td>320,000</td>
<td>0</td>
<td>394,783</td>
</tr>
<tr>
<td>Remaining Developable Land (as of end 2018)</td>
<td>5,815</td>
<td>813,899</td>
<td>738,693</td>
<td>1,160,894</td>
<td>528,601</td>
<td>3,242,086</td>
</tr>
<tr>
<td>Approved &amp; Under Construction Projects [3]</td>
<td>3,417</td>
<td>152,622</td>
<td>18,834</td>
<td>202,454</td>
<td>117,366</td>
<td>491,276</td>
</tr>
<tr>
<td>Remaining Developable Land (through 2025)</td>
<td>2,398</td>
<td>661,277</td>
<td>719,859</td>
<td>958,440</td>
<td>411,235</td>
<td>2,750,810</td>
</tr>
</tbody>
</table>

\[1\] 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.
This map is a product of the City of San Buenaventura, California. While reasonable efforts have been made to ensure the accuracy of this map, the City of San Buenaventura cannot guarantee its accuracy.
3. WATER DEMANDS

A. EXISTING DEMAND CONDITION

The annual water consumption figures for the past ten years are provided in subsection 3.D.

Table 3-1 summarizes the total water consumption (potable, recycled, and untreated) for each consumption category within the City’s water service area for the most recent complete year of data, CY 2018. As shown in Table 3-1, the total water consumption for CY 2018 was 14,211 AFY, including the 5.0% water loss factor.

Table 3-1
Summary of Existing Water Consumption for CY 2018

<table>
<thead>
<tr>
<th>City Consumption Category</th>
<th>Water Consumption (HCF) [1]</th>
<th>Water Consumption (gpm)</th>
<th>Water Consumption (gpd)</th>
<th>Water Consumption (AFY)</th>
<th>Water Consumption + 5.0% Loss (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>2,309,132</td>
<td>3,286.21</td>
<td>4,732,139</td>
<td>5,301</td>
<td>5,566</td>
</tr>
<tr>
<td>Multi Family</td>
<td>1,418,771</td>
<td>2,019.10</td>
<td>2,907,509</td>
<td>3,257</td>
<td>3,420</td>
</tr>
<tr>
<td>Commercial/Retail/Industrial/Hotel</td>
<td>1,250,090</td>
<td>1,779.05</td>
<td>2,561,828</td>
<td>2,870[2]</td>
<td>3,013</td>
</tr>
<tr>
<td>Hospitals</td>
<td>129,793</td>
<td>184.71</td>
<td>265,987</td>
<td>298</td>
<td>313</td>
</tr>
<tr>
<td>Parks/Landscape/Irrigation</td>
<td>400,556</td>
<td>570.05</td>
<td>820,865</td>
<td>920[4]</td>
<td>966</td>
</tr>
<tr>
<td>Total</td>
<td>5,895,525</td>
<td>8,390.13</td>
<td>12,081,788</td>
<td>13,534</td>
<td>14,211</td>
</tr>
</tbody>
</table>

[1] Source: HCF Consumption Data Tables (CY 2018)
[2] Includes 38.09 AFY of recycled water.
[3] Includes 5.18 AFY of recycled water.
[4] Includes 554.96 AFY of recycled water.
[5] “Other” category in the initial 2013 CWRR excluded water consumption data for certain specialized uses, such as temporary construction water and fire training usage, so as not to skew the demand factors calculated in 2013. This methodology was maintained for Table 3-1 in the 2014-2018 CWRRs. However,
staff added the specialized water consumption data into this category beginning with the 2019 CWRR to better reflect actual consumption. "Other" category now includes authorized consumption for miscellaneous uses that do not fit the definitions of the above consumption categories (i.e. oil industry use, temporary construction water, and fire training).

[6] Includes 54.93 AFY of untreated water.

B. CONSUMPTION AND USAGE FACTORS

Future water demands are calculated using available land use data and corresponding water demand factors. Prior to the 2013 CWRR, the City had been utilizing the water demand factors identified in the 2005 General Plan FEIR to calculate future water demands. However, City staff recognized that the demand factors identified in the FEIR are very conservative, planning-level factors. City staff felt it prudent to develop more accurate water demand factors based on recent, historical billing data.

Utilizing land use information quantified in Section 2, water consumption factors were calculated for each consumption category based upon the CY 2012 water consumption data. The consumption factor calculations excluded the water consumption data for any specialized, or non-typical, land uses so as not to skew the factors. A consumption factor was calculated for each of the water consumption categories, provided adequate consumption data and land use data was available. Due to an apparent inconsistency in the reported building area, the calculated factor for the “Public/Institutional” category was significantly higher than industry norms. Therefore, for the purposes of this Report, one factor was calculated for the “Non-Residential” customers, which included the “Commercial/Retail/Industrial/Hotel” category and the “Public/Institutional” category. Table 3-2 provides detail for how each of the categories consumption factor was calculated. Please note, the calculations in Table 3-2 are considered “raw factors,” and do not factor in water loss or contingency.

The raw consumption factors were used as a basis to calculate a “Usage Factor,” or planning-level consumption factor. The usage factors adjust the consumption factors to include a 6.5% water loss factor, per the 2010 UWMP, and a 20% contingency (factor of safety) for planning purposes, which is consistent with industry standards/practices. Table 3-3 provides a summary of the water usage factors recommended for use in calculating all future water demands for projects where development densities are known.

It should be noted that the water demand factors in Table 3-3 are not updated on an annual basis. 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).
## Table 3-2
Calculation of Raw Consumption Factors for CY 2012

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family Res.</td>
<td>3,212,783</td>
<td>4,572.2</td>
<td>6,584,005</td>
<td>7,376</td>
<td>22,577</td>
<td>229</td>
<td>292 gpd/du</td>
</tr>
<tr>
<td>Multi-Family Res.</td>
<td>1,708,860</td>
<td>2,431.9</td>
<td>3,501,993</td>
<td>3,923</td>
<td>18,511</td>
<td>189</td>
<td>189 gpd/du</td>
</tr>
<tr>
<td>Commercial/Retail/Industrial/Hotel</td>
<td>1,491,845</td>
<td>2,123.1</td>
<td>3,057,260</td>
<td>3,425</td>
<td>18,511</td>
<td>17,318</td>
<td>206 gpd/ksf [3]</td>
</tr>
<tr>
<td>Public/Institutional</td>
<td>250,903</td>
<td>357.1</td>
<td>514,179</td>
<td>576</td>
<td>465</td>
<td>424</td>
<td>424 gpd/bed</td>
</tr>
<tr>
<td>Hospital/Assisted Living</td>
<td>96,261</td>
<td>137.0</td>
<td>197,269</td>
<td>221</td>
<td>465</td>
<td>221</td>
<td>221 gpd/bed</td>
</tr>
<tr>
<td>Park/Landscape/Irrigation [4]</td>
<td>398,875</td>
<td>567.7</td>
<td>817,421</td>
<td>916</td>
<td>522</td>
<td>1,566</td>
<td>1,566 gpd/acre</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7,159,527</strong></td>
<td><strong>10,189.0</strong></td>
<td><strong>14,672,127</strong></td>
<td><strong>16,436</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[1] Per Table 3-1
[2] Per Table 2-3.
[3] "Public/Institutional" was consolidated with "Commercial/Retail/Industrial" because gross square footages could not be accurately broken out for the two categories.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (0-8 du/ac)</td>
<td>292 gpd/du</td>
<td>311 gpd/du</td>
<td>370 gpd/du</td>
</tr>
<tr>
<td>Residential (9-20 du/ac)</td>
<td>189 gpd/du</td>
<td>201 gpd/du</td>
<td>250 gpd/du</td>
</tr>
<tr>
<td>Residential (21+ du/ac)</td>
<td>189 gpd/du</td>
<td>201 gpd/du</td>
<td>250 gpd/du</td>
</tr>
<tr>
<td>Public/Institutional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital/Assisted Living</td>
<td>424 gpd/bed</td>
<td>452 gpd/bed</td>
<td>545 gpd/bed</td>
</tr>
<tr>
<td>Park/Landscape/Irrigation</td>
<td>1,566 gpd/acre</td>
<td>1,668 gpd/acre</td>
<td>2,000 gpd/acre</td>
</tr>
</tbody>
</table>

[1] Per Table 3-2.
[2] "Public/Institutional" was consolidated with "Commercial/Retail/Industrial" because gross square footages could not be accurately broken out for the two categories.
[3] Per 2010 UWMP.
C. USAGE FACTOR COMPARISON

The water usage factors calculated for the City per the 2013 CWRR were compared with other southern California water agencies with similar characteristics – population, climate, water supply sources. These included local agencies such as the City of Simi Valley and the City of Thousand Oaks, as well as two other southern California agencies that have performed extensive research into calculating usage factors, the Irvine Ranch Water District and the Santa Margarita Water District. When compared to the other agency’s factors, the low and medium density residential factors and the parks/irrigation factor calculated for Ventura are on the low side. The high density residential factor and the non-residential factor are both on the high side. Although the factors are either on the low or high side when compared to other agencies, this is likely due to the way Ventura classifies the consumption categories for billing purposes. Overall, the demand factors calculated for the City in 2013 were within reason when compared to neighboring agencies. The comparison of water usage factors is shown on Table 3-4.
## Table 3-4
### Water Consumption Factor Comparison

<table>
<thead>
<tr>
<th>Water Demand Factor Classification</th>
<th>Southern California Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Density Residential (2-4.5 du/ac)</td>
<td>-</td>
</tr>
<tr>
<td>Residential (0-8 du/ac)</td>
<td>370 gpd/du</td>
</tr>
<tr>
<td>Medium Density Residential (4.5-15 du/ac)</td>
<td>-</td>
</tr>
<tr>
<td>Residential (9-20 du/ac)</td>
<td>250 gpd/du</td>
</tr>
<tr>
<td>High Density Residential (15-30 du/ac)</td>
<td>-</td>
</tr>
<tr>
<td>Condominium</td>
<td>-</td>
</tr>
<tr>
<td>Multi-Family Apartment</td>
<td>-</td>
</tr>
<tr>
<td>Residential (21+ du/ac)</td>
<td>250 gpd/du</td>
</tr>
<tr>
<td>Commercial/Retail/Industrial/Hotel</td>
<td>265 gpd/ksf</td>
</tr>
<tr>
<td>Public/Institutional</td>
<td>545 gpd/bed</td>
</tr>
<tr>
<td>Hospital/Assisted Living</td>
<td>-</td>
</tr>
<tr>
<td>Commercial</td>
<td>-</td>
</tr>
<tr>
<td>Industrial</td>
<td>-</td>
</tr>
<tr>
<td>Industrial - Light</td>
<td>-</td>
</tr>
<tr>
<td>Industrial - Heavy</td>
<td>-</td>
</tr>
<tr>
<td>Institutional</td>
<td>-</td>
</tr>
<tr>
<td>School</td>
<td>-</td>
</tr>
<tr>
<td>Park/Landscape/Irrigation</td>
<td>2,000 gpd/acre</td>
</tr>
<tr>
<td>Parks, Golf Courses, Open Space, Recreation Areas</td>
<td>-</td>
</tr>
<tr>
<td>Open Space, Community Park (Passive) Recreation Facility</td>
<td>-</td>
</tr>
<tr>
<td>Community Park (Active)</td>
<td>-</td>
</tr>
<tr>
<td>Community Facility</td>
<td>-</td>
</tr>
</tbody>
</table>

[2] Table III-1, Ventura County Waterworks District No. 8 Water Master Plan, February, 2016.  
[5] Table 3-3 herein.
D. HISTORICAL WATER CONSUMPTION (BASELINE DEMAND CONDITION)

To calculate the future 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. The historical water data was gathered for the past 10-year period. In the previous 2013 to 2016 CWRRs, the City used the most recent 5-year average as the baseline demand condition. However, it was recommended in the 2016 CWRR that the City use the 10-year average in future reports in order to capture pre-drought demands. Thus, the 2017, 2018, and 2019 CWRRs utilize the 10-year average demand. Table 3-5 provides a summary of the City-wide water consumption for each year from 2009 to 2018. The consumption numbers are also depicted graphically on Figure 3-1.

Table 3-5 shows the variability in City-wide water demands. The City experienced a high in 2009 (17,871 AFY) and again in 2012 (18,004) with steady declines to a low in 2017 (13,973 AFY). The average annual water consumption for Years 2009 to 2013 (17,343 AFY) was significantly higher than the average annual consumption for Years 2014 to 2018 (14,727 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 water conservation legislation. The Water Conservation Act of 2009 (Senate Bill x7-7) requires water suppliers to maintain a reduced urban water use target. This bill, along with the Long-Term Conservation Bills passed in May 2018 (Assembly Bill 1668 and Senate Bill 606), will result in water municipalities maintaining aggressive water conservation programs. In addition, the drop in consumption can be attributed to the City's request for customers to voluntarily reduce their water usage by 10% in February 2014 and the request for 20% mandatory reduction that has been in place since September 2014.

Over the most recent 5-year period (Years 2014 to 2018), the average annual average water consumption was 14,727 AFY, with the lowest year approximately 5.1% lower than the average and the highest year approximately 15.4% above the average. Over the most recent 10-year period (Years 2009 to 2018), the average annual water consumption was 16,035 AFY, with the lowest year approximately 12.9% lower than the average and the highest year approximately 12.3% above the average. The variability shown in Table 3-5 indicates that some of the water use reduction trends may revert back to previous habits, however some will remain.

Utilizing 10 years of water data will capture the year-to-year variabilities which occur.
purposes of establishing a baseline average annual water demand for the existing condition, the 10-
year average from the preceding 10 years of water consumption data is used. Therefore, the
baseline water demand established for this report is the 10-year average (2009 to 2018) of 16,035
AFY.

Table 3-5

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Consumption [1] (AF)</th>
<th>Averages, AFY [2]</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>17,871</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>16,565</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>16,550</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>18,004</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>17,723</td>
<td>17,343</td>
</tr>
<tr>
<td>2014</td>
<td>16,995</td>
<td>16,035</td>
</tr>
<tr>
<td>2015</td>
<td>14,194</td>
<td>14,149</td>
</tr>
<tr>
<td>2016</td>
<td>14,262</td>
<td>14,727</td>
</tr>
<tr>
<td>2017</td>
<td>13,973</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>14,211</td>
<td></td>
</tr>
</tbody>
</table>

[1] Provided by Ventura Water. The CY 2009 to 2017 consumption data included a 6.5% water loss factor. The CY 2018 includes a 5.0% water loss factor based on the preliminary State-required water loss audit. The water loss factor will be updated annually beginning with the 2019 CWRR.

[2] Staff intends to use the 10-year average for baseline demand unless changed circumstances arise. The 3-year and 5-year averages are provided for informational purposes, and are not used in the demand calculation.
E. FUTURE DEMAND PROJECTIONS

This Report projects growth through 2030. The proposed near-term development projects that have been approved by the City but are not yet connected to the City’s water system are used to project water demands for the next 5 years (2023). This includes projects that are currently under construction, or were under construction in December 2018, and projects that have all City approvals, but have yet to begin construction (Table 2-4).

The future average annual water demands for the projects were calculated utilizing the City-specific usage factors listed in Table 3-3. The factors were applied to each project in Table 2-4, per the detailed land use breakdown. As summarized in Table 3-6, the increase in water demand for near-term development projects is estimated to be 1,346 acre-feet/year (AFY). Table 3-6 also identifies the portion of the near-term demands, 582 AFY, that are estimated to be within the service area of the Casitas Municipal Water District.

Adding demands for these near-term development projects to the baseline demand, the total near-term water demands are estimated to be 17,405 AFY, as shown on Table 3-7.

Table 3-6
Total Estimated Demands for Under Construction and Approved Projects
As of December 2018

<table>
<thead>
<tr>
<th>Water Demand Factor Classification</th>
<th>Quantity</th>
<th>Usage Factor</th>
<th>Estimated Future Water Demand</th>
<th>Quantity</th>
<th>Estimated Average Water Demand (within Casitas Boundary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (0-8 du/ac)</td>
<td>661 du</td>
<td>370 gpd/du</td>
<td>244,570 gpd</td>
<td>120 du</td>
<td>44,400 gpd</td>
</tr>
<tr>
<td>Residential (9-20 du/ac)</td>
<td>2,756 du</td>
<td>250 gpd/du</td>
<td>525,000 gpd</td>
<td>1,360 du</td>
<td>340,000 gpd</td>
</tr>
<tr>
<td>Residential (21+ du/ac)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial/Retail/Industrial/Hotel Public/Institutional</td>
<td>491 ksf</td>
<td>265 gpd/ksf</td>
<td>130,188 gpd</td>
<td>36.9 ksf</td>
<td>9,790 gpd</td>
</tr>
<tr>
<td>Park/Landscape/Irrigation</td>
<td>7.97 ac</td>
<td>2,000 gpd/ac</td>
<td>15,940 gpd</td>
<td>3.0 ac</td>
<td>6,000 gpd</td>
</tr>
<tr>
<td>Hospital/Assisted Living</td>
<td>0 bed</td>
<td>545 gpd/bed</td>
<td>0 gpd</td>
<td>0 bed</td>
<td>0 gpd</td>
</tr>
<tr>
<td>PROJ-5810 Ventura Botanical Gardens [3][4]</td>
<td></td>
<td></td>
<td>134 AFY</td>
<td></td>
<td>134 AFY</td>
</tr>
<tr>
<td>PROJ-11236 Mobil Gas[5]</td>
<td></td>
<td></td>
<td>2.46 AFY</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>1,079,698 gpd</strong></td>
<td></td>
<td><strong>400,190 gpd</strong></td>
</tr>
</tbody>
</table>

[1] Per Table 2-4
[2] Per Table 3-3
[3] Within Casitas Boundary, per Table 2-4 (included in the total).
[5] Total Annual Demand Value as reported in the Water Infrastructure Review – Mobil Gas Station & Carwash, dated September 12, 2014
Table 3-7
Projected Total Water Demands Including Under Construction and Approved Projects – Various Baselines

<table>
<thead>
<tr>
<th>Baseline Demand Condition</th>
<th>Baseline Water Demand</th>
<th>Projected Water Demand [1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Year: 2018</td>
<td>14,211 AFY</td>
<td>15,557 AFY</td>
</tr>
<tr>
<td>3-Year Average: 2016-2018</td>
<td>14,149</td>
<td>15,495</td>
</tr>
<tr>
<td>5-Year Average: 2014-2018</td>
<td>14,727</td>
<td>16,073</td>
</tr>
<tr>
<td><strong>10-Year Average: 2009-2018</strong></td>
<td><strong>16,035</strong></td>
<td><strong>17,381</strong></td>
</tr>
<tr>
<td>Past 5-Year Period: Annual High Year</td>
<td>16,995</td>
<td>18,341</td>
</tr>
<tr>
<td>Past 10-Year Period: Annual High Year</td>
<td>18,004</td>
<td>19,350</td>
</tr>
</tbody>
</table>

[1] Includes an additional near-term demand of 1,346 AFY per Table 3-6.

Note: The previous CWRR's (2013 to 2016) utilized a 5-year average baseline water demand. The 2017, 2018, and 2019 CWRRs utilize a 10-year average baseline water demand.

It is assumed that the approved and under construction projects listed in Table 2-4 will be completed within the next 5 years (2019 to 2023). The total estimated demands associated with the completion of these projects (1,346 AFY per Table 3-6) were applied evenly from 2019 to 2023. In order to project estimated demands from 2024 through 2030, an approximate growth rate of 0.54% (Per City Planning Department based on the Department of Finance historical data for population) was used to estimate the increase in demand from the time all approved projects were fully vested (year 2023) to the Year 2030. The City's Community Development Department confirmed this growth rate figure is reasonable.
# Table 3-8: Projected Water Demand Growth

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>16,035 AFY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>269.2</td>
<td>0.54%</td>
<td>16,304</td>
</tr>
<tr>
<td>2020</td>
<td>269.2</td>
<td>0.54%</td>
<td>16,573</td>
</tr>
<tr>
<td>2021</td>
<td>269.2</td>
<td>0.54%</td>
<td>16,842</td>
</tr>
<tr>
<td>2022</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,112</td>
</tr>
<tr>
<td>2023</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,381</td>
</tr>
<tr>
<td>2024</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,475</td>
</tr>
<tr>
<td>2025</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,571</td>
</tr>
<tr>
<td>2026</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,666</td>
</tr>
<tr>
<td>2027</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,763</td>
</tr>
<tr>
<td>2028</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,859</td>
</tr>
<tr>
<td>2029</td>
<td>269.2</td>
<td>0.54%</td>
<td>17,957</td>
</tr>
<tr>
<td>2030</td>
<td>269.2</td>
<td>0.54%</td>
<td>18,055</td>
</tr>
<tr>
<td>Totals</td>
<td>1,346</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[1] Per Table 3-6 - 1,346 AF from approved and under construction projects divided over the next five years.
[2] Per City Planning Department based on the Department of Finance historical data for population.
[3] Projections based on Baseline Demand Condition, per Table 3-7.
4. **WATER SUPPLY**

A. INTRODUCTION

The City’s potable water supply is derived from local groundwater basins, Lake Casitas and subsurface water from the Ventura River. The City also has a 10,000 acre-foot per year entitlement from the California State Water Project. To date the City has not received any of this water because there are no existing facilities to get the water directly into the City’s distribution system. However, the City has completed an alignment study and is currently working through the environmental review process for the State Water Interconnection Project that will enable the City to receive its State Water allocation through a connection to Calleguas Municipal Water District. The Project is expected to be completed in 2023.

There are presently five local water sources that provide water to the City water system:

- Casitas Municipal Water District (Casitas)
- Ventura River Foster Park Area (Foster Park)
  - Upper Ventura River Groundwater Basin/Subsurface Intake and Wells
- Mound Groundwater Basin (Mound Basin)
- Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)
- Santa Paula Groundwater Basin (Santa Paula Basin)

The City also provides recycled water from the Ventura Water Reclamation Facility (VWRF). The existing six water supply sources and associated supply conditions are discussed in the following sections:

- Normal (non-drought) water supply sources – The City’s water supply in a normal (non-drought) year. The City’s normal water supply portfolio is summarized in Table 4-1.
- Current water supply sources - The City’s water supply under existing conditions (normal, drought, or other emergency conditions) in the current calendar year. The City’s current water supply portfolio is summarized in Table 4-2.
- Projected future water supply sources – The City’s projected water supply through 2030 evaluating both normal and drought conditions. The City’s projected future water supply is summarized in Table 4-3.

Please refer to Figure 4-1 for the locations and boundaries of the City’s supply sources.
Figure 4-1

Source: Eagle Aerial, Dec 2007

Legend
- City of Ventura
  Treatment Plant or Conditioning Facility
- Groundwater Basins
- Regional Water District Boundaries

Supply Sources

CITY OF SAN BUENAVENTURA
B. NORMAL (NON-DROUGHT) WATER SUPPLY SOURCES

For the purposes of this report, a normal (non-drought) year is defined by the March 2015 Water Shortage Event Contingency Plan (WSECP). When the stages of the 2015 WSECP are not activated, the City is experiencing normal conditions. The background for the normal (non-drought) water supply portfolio for each source is discussed below and summarized in Table 4-1.

1. Casitas Municipal Water District (Casitas)

The City purchases treated water from Casitas Municipal Water District to provide water supply to a portion of the City. Historically, the City has purchased a third of its water supply from Casitas during “normal” or “non-drought” years. Ventura River diversions and storm water runoff from local watersheds are stored in Lake Casitas, located approximately 10 miles northwest of the City, then treated and delivered to customers by Casitas. Casitas supplies potable water to agricultural, domestic, municipal, and industrial users within its service area. The Casitas service area includes the Ojai Valley, the western part of the City, and the coastal area between the City and Santa Barbara County.

The City’s 1995 water purchase agreement with Casitas required a minimum annual purchase of 6,000 AFY, which was subject to Casitas’ allocation program during drought periods. In May 2017, the City Council approved a new Water Services Agreement between the City and Casitas that establishes that Casitas shall supply the City with sufficient water to meet its in-district projected water demand. The following items summarize major changes and/or new provisions in the Agreement:

- Casitas shall supply the City with sufficient water to meet its Projected Water Demand.
- The City shall submit a Projected Water Demand to Casitas by the last business day of May of every year.
  - The Projected Water Demand is the total amount of water needed to meet the City’s water needs within Casitas boundaries and shall include any adjustments on demand associated with land use.
- In the event that Casitas must enact its Water Efficiency and Allocation Program (WEAP) due to a water shortage, Casitas may adjust the City’s Allocation consistent with the percentage reduction for the WEAP stage.
- The City’s Stage 1 Allocation shall be the average of the City’s Projected Water Demand during the five (5) most recent years during which neither the City nor Casitas are implementing their water shortage contingency plans.
- The City shall annually certify, no later than the last business day of August, whether it achieved Water Balance. The certification shall identify Purchased Water, Actual In-District Demand, and Water Loss.
- The City achieves Water Balance when the below calculation equals a negative number or zero.
Water Balance = Purchased Water – Actual In-District Demand

Actual In-District Demand: The water purchased and utilized by the City within Casitas boundaries as certified by the City on an annual basis.

- Actual In-District Demand = (City Metered Water within Casitas Boundaries) + (Water Loss x Purchased Water)

Water Loss shall be determined based on the following calculation:

- Water Loss = (Citywide Water Production – Citywide Metered Sales)/Citywide Water Production

The Water Loss calculation will be made each year by the City and may be revised to meet State-prescribed definitions and/or standards.

In order to estimate the normal year supply from Casitas the following assumptions were made:

The amount of City metered water within the Casitas boundaries and purchased water was taken from the past five non-drought fiscal years (FY 09-10 to FY 13-14) certification letters from the City to Casitas. Fiscal Year 09-10 through Fiscal Year 13-14 were considered non-drought years.

The percent used for water loss calculations is 6.5 percent based on the City’s 2010 Urban Water Management Plan. Therefore, the five year average normal (non-drought) water supply from Casitas is estimated to be 5,062 AFY.

To calculate the current (2019) normal water supply from Casitas, the demand from the proposed development projects that are anticipated to be utilizing water by Fiscal Year 2019 are added to the five year average normal (non-drought) water supply from Casitas of 5,062 AFY. Projects completed since fiscal year 2014 and projects expected to be completed within calendar year 2019 are assumed to be utilizing water in Fiscal Year 2019. The normal water supply from Casitas is estimated to be 5,375 AFY and is reflected in Table 4-1.

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

Water from the Ventura River is collected via surface diversion, subsurface collector, and shallow wells and delivered to the Avenue Treatment Plant through the City’s Foster Park facilities. Production from this source is a function of several factors including diversion capacity, local hydrology, environmental impacts, the storage capacity of the Ventura River alluvium, and upstream diversions. Currently, the surface intake structure is unused due to channeling of the active river channel bypassing the structure.

The Foster Park facilities produce groundwater throughout the year. However, due to storm flows, the wells are subject to inundation and erosion. The early 2005 winter storms destroyed Nye Well 1A and damaged Nye Wells 2, 7 and 8. The pipeline between Nye Wells 7 and 8 along the west bank of the river and the pipeline that crosses the river from Nye Well 8 to the intake pipeline for
the Avenue Treatment Plant were also damaged during the storms. Nye Wells 7 and 8 were repaired in late 2006, the pipeline across the river was repaired in late 2007, and the pipeline repair between Nye Wells 7 & 8 was completed in early 2009. To date, Nye Well 2 has not been repaired or replaced.

In conjunction with the Matilija Dam Ecosystem Restoration Project, two additional wells, No. 12 and 13, were installed at Foster Park as part of the dam removal mitigation measures. It should be noted these mitigation wells are currently not operational. The mitigation wells were funded by and constructed through a grant received by the Ventura County Watershed Protection District for the City in order to mitigate for water that is expected to be lost as a result of increases in turbidity due to the Matilija Dam removal process. Though these wells have been drilled, they are not connected to the wellfield infrastructure and have not been permitted by the California Department of Public Health as a raw water source for the City's Avenue Water Treatment Plant. These wells cannot be utilized until the Dam removal process is completed. Additionally, the wells are subject to the Biological Opinion for the Matilija Dam Removal and can only be operated when Ventura River flows are above 15 cubic feet per second (cfs).

The City's historical production based on the 50-year average production from 1950-2000 was 6,015 AFY. However, current operational constraints allow a diversion efficiency of up to 70 percent (average 4,200 AFY) to be obtained under the City's operations schedule, which can be considered reliable for planning purposes. Therefore the City's normal water supply from the Ventura River / Foster Park is 4,200 AFY. Potential reductions to this supply number by proposed regulatory and environmental constraints are discussed in Section 4D.

3. Mound Groundwater Basin (Mound Basin)

The Mound Groundwater Basin has historically provided water for overlying beneficial uses and satisfies agricultural, municipal, and industrial demands. Historical use has been documented to temporarily exceed the yield of the basin and result in water levels that have fallen below sea level and created a threat of seawater intrusion. To abate this threat the City abandoned its historical coastal well facilities and located groundwater extraction near the center of the Mound Basin. A report (Fugro, 1997) compiled as part of a 1996 study of the basin indicated that historical data supports a basin yield of at least 8,000 AFY during drought conditions as long as pumpage is reduced during wet years to allow water levels to recover. The City's average annual extraction from 2000 to 2009 was approximately 4,000 AFY.

Currently, two City wells withdraw water from the Mound Groundwater Basin; Victoria Well No. 2, which was installed in 1995, and Mound Well No. 1, which began production in April 2003. Victoria Well No. 1, which was installed in 1982, is considered an inactive well at this time due to maintenance and water quality issues. The City recently reached an agreement with the County on deeding to the
County its interest in Victoria Well #1 and acquiring land for drilling of Mound Well #2. Construction of Mound Well #3 is currently in progress and is scheduled to be in production in 2020. Therefore the City’s normal water supply from the Mound Basin is 4,000 AFY.

4. Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)

Wells near the Buenaventura Golf Course pump from the Fox Canyon Aquifer of the Oxnard Plain Groundwater Basin. Currently, three wells, Golf Course Wells No. 5, 6, and 7 produce potable water for the City’s system.

The Fox Canyon Groundwater Management Agency (FCGMA) was created by state legislation in 1982 to manage local groundwater resources in a manner to reduce overdraft of the Oxnard Plain and stop seawater intrusion. A major goal of the FCGMA is to regulate and reduce future extractions of groundwater from the Oxnard Plain aquifers, in order to operate and restore the basin to a safe yield. In August 1990, the FCGMA passed Ordinance No. 5, which required existing groundwater users to reduce their extractions by five percent every five years until a 25 percent reduction was reached by the year 2010.

The City's historical allocation was set by the FCGMA at 5,472 AFY, which was the average extraction from the Golf Course Wells for the base period 1985 to 1989. Beginning in 1992, historical extractions set by the FCGMA were reduced by five percent (5%) to 5,198 AFY, in 1995 it was reduced to 4,925 AFY, in 2000 it was reduced to 4,651 AFY and further reduced in 2010 to the current allocation of 4,100 AFY. Therefore the City's normal (pre FCGMA Emergency Ordinance E, further discussed in Section C) water supply from the Oxnard Plain Basin is 4,100 AFY.

5. Santa Paula Groundwater Basin (Santa Paula Basin)

The Saticoy Water Company was acquired by the City in 1968, which included Saticoy Well No. 1 that produced water from the Santa Paula Basin. Due to casing failure, the well was destroyed and replaced in 1991 with a new well designated as Saticoy Well No. 2. Well No. 2 was placed in the same general location as Well No. 1. In May 2003, Saticoy Well No. 2 was rehabilitated. After rehabilitation, the resulting sustainable well supply was 1,600 AFY.

In March 1996, the City ended a five-year stalemate over the use of the Santa Paula Basin. Under a court stipulated judgment, the United Water Conservation District (United), the Santa Paula Basin Pumpers Association (an association of ranchers and businesses), and the City all have an interest in the Santa Paula Basin. The City can pump on average 3,000 AFY from the Santa Paula Basin. The City is not limited to this allocation in any single year, but may produce seven times its average annual allocation (21,000 AF) over any running seven-year period. In addition, under certain circumstances and conditions described in the stipulated judgment, the City may be able to pump an additional 3,000
AFY in case of an emergency, such as a fire, flood, earthquake, or resulting from a long-term drought situation.

Construction of Saticoy Well No. 3 was completed in 2015 and Saticoy Well No. 2 remains active as a back-up well. Prior to 2014, the City acquired 5.8 acre-feet of water rights in the Santa Paula Basin from the past development of Tract 4632. In 2016, the City acquired 35.1 acre-feet of water rights in the Santa Paula Basin from the development of Tracts 5632 and Tract 5774 (see Table 4-1). Therefore, the City’s normal water supply from the Santa Paula Basin is 3,041 AFY.

6. Recycled Water

The City collects and treats wastewater at its Ventura Water Reclamation Facility (VWRF). The reclamation facility capacity is currently permitted for 14 MGD; however, the secondary treatment limits the plant capacity to 12 MGD. The reclamation facility is permitted to discharge an annual average of up to 9 MGD. The VWRF discharges less than this during drought conditions. A portion of the tertiary treated effluent is pumped to recycled water customers and the remaining tertiary treated effluent is discharged to the Santa Clara River Estuary (Estuary). The recycled water produced from the VWRF is used for general irrigation of the two golf courses, a City park, and landscape irrigation areas located along the existing distribution alignment. The City’s 2015 Urban Water Management Plan projected that annual recycled water demand would be 700 AFY in 2019.

With continuing drought conditions and shortages in water supply, the City sought to expand the use of recycled water. There was limited use under the City’s current permit originally issued in 1987 by the Los Angeles Regional Water Quality Control Board (LARWQCB) for water reclamation. Therefore, the City was directed by the LARWQCB and the State Water Resources Control Board (SWRCB) to submit a Change Petition to add dust control and residential irrigation use as permitted uses as well as account for reduced discharges of treated wastewater to the Santa Clara River Estuary. The City filed a Wastewater Change Petition with the SWRCB Division of Water Rights on April 17, 2015.

A mobile Reuse Program was created and submitted to the LARWQCB and the SWRCB Division of Drinking Water for approval on August 19, 2015. The City was given permission by LARWQCB to begin hauling recycled water from the VWRF to use on City trees, but not for use by residents and the other designated non-residential customers until the Change Petition and CEQA process was completed. Approval for the Wastewater Change Petition WW0083 was given on May 6, 2016. It increased the amount of available recycled water use from 0.67 MGD to 2.0 MGD. The approved uses for recycled water were for landscape irrigation and dust control at locations specified in the petition and CEQA Initial Study and Negative Declaration document. In CY 2018, approximately 14.52 acre-feet of recycled water was served from the Recycled Water Fill Station. The demand from the Mobile Reuse Program is not included in Table 4-1.
The City’s normal water supply portfolio is summarized in Table 4-1.

### Table 4-1

Summary of Normal Water Supply 2019*

<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>Normal Supply AFY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Municipal Water District [1]</td>
<td>5,375</td>
</tr>
<tr>
<td>Ventura River / Foster Park</td>
<td>4,200</td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>4,000</td>
</tr>
<tr>
<td>Oxnard Plain Groundwater Basin</td>
<td>4,100</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin [2]</td>
<td>3,000</td>
</tr>
<tr>
<td>City Acquired Water Rights [3]</td>
<td>40.9</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>21,415 AF</strong></td>
</tr>
</tbody>
</table>

[1] Demand within Casitas service area is based on the 2017 Agreement. The five year average normal (non-drought) water supply from Casitas is estimated to be 5,062 AFY. Adding in development since 2014 (estimated to be 256 AFY) brings the total normal year supply to 5,375 AFY.

[2] Includes 3,000 AF of original City allocation and


*Table 4-1 per the 2015 WSECP was previously identified as Summary of Current Water Supply.
C. CURRENT WATER SUPPLY SOURCES (2019)

For the purposes of this report, the City’s current water supply sources is defined as the City’s water supply under existing conditions (normal, drought, or other emergency conditions) in the current calendar year. The current water supply sources under existing conditions in calendar year 2019 will be evaluated for drought impact. The background for the current water supply portfolio for each source is discussed below and summarized in Table 4-2.

1. Casitas Municipal Water District (Casitas)

As mentioned in the Normal Water Supply section, a Water Services Agreement between the City and Casitas was finalized and approved by City Council in May 2017. The agreement indicates that in the event that Casitas must enact its Water Efficiency and Allocation Program (2015 WEAP) due to a water shortage, Casitas may adjust the City’s allocation consistent with the percentage reduction for the WEAP stage.

Casitas has assigned five stages of water storage in Lake Casitas that serve as a guidance to triggering the implementation of water use reduction goals and measures.

Table 3 – Stage Conditions from Casitas Municipal Water District’s “Water Efficiency and Allocation Program” dated May 9, 2018

<table>
<thead>
<tr>
<th>Stage</th>
<th>Stage Title</th>
<th>Lake Casitas Storage (%)</th>
<th>Demand Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water Conservation</td>
<td>100% to 50%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>Water Shortage Warning</td>
<td>50% to 40%</td>
<td>20%</td>
</tr>
<tr>
<td>3</td>
<td>Water Shortage Eminent</td>
<td>40% to 30%</td>
<td>30%</td>
</tr>
<tr>
<td>4</td>
<td>Severe Water Shortage</td>
<td>30% to 25%</td>
<td>40%</td>
</tr>
<tr>
<td>5</td>
<td>Critical Water Shortage</td>
<td>25% to 0%</td>
<td>50%</td>
</tr>
</tbody>
</table>

The Casitas General Manager shall report to the Casitas Board of Directors each year with an assessment of the current water storage in Lake Casitas and local groundwater basins, current water use trends, predicted weather conditions, and an evaluation of current water use reduction goals. The report may be delivered in April or as Lake Casitas storage reaches a change in Stage action level. The Casitas Board of Directors may, at their sole discretion, declare that a Stage condition of water supply in Lake Casitas exists and implement the appropriate demand reduction goals and measures in response to current and/or predicted water availability conditions.

As of March 2019, Casitas is currently in a Stage 3 water supply condition per Casitas Resolution No. 16-00. The current lake level as of March 14, 2019 was 43 percent full. The Casitas Board of Directors may not make a final decision on the Stage condition until April or May 2019. As of April 10, the Board of Directors has not made a decision on whether to change the stage condition for Fiscal
Year 2019-2020, but CMWD staff has indicated that it is unlikely that the Board will declare a Stage 2 water supply condition. In order to be conservative, the 2019 CWRR assumes that Casitas will remain in a Stage 3 Drought condition, and imposes a reduction of 30% to the City's Casitas supply consistent with the Stage 3 mandates.

The Water Services Agreement between Casitas and the City specifies that the City’s Stage 1 Allocation shall be the average of the City’s Projected Water Demand during the five (5) most recent years during which neither the City nor Casitas are implementing their water shortage contingency plans. The projected water demand from the past five non-drought fiscal years (FY 09-10 to FY 13-14) certification letters from the City to Casitas including demand associated with land use change is 5,375 AFY. A Stage 3 demand reduction of 30% would result in a supply of 3,763 AFY.

Therefore, the City's current water supply from Casitas is 3,763 AFY for calendar year 2019.

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

Due to continued drought conditions and heightened environmental requirements, the City’s ability to draw water from the Ventura River continues to be significantly challenged and impacted. To determine the City’s current water supply with the existing drought conditions, the five-year production average from 2014 to 2018 was selected. This date range was selected since it reflects current drought conditions. Therefore, the City’s current water supply from Ventura River / Foster Park is 2,323 AFY for calendar year 2019.

3. Mound Groundwater Basin (Mound Basin)

Due to operational constraints, production from the Mound Basin has been lower than the historical 10-year average discussed in the Normal Water Supply section. To determine the City’s current water supply, the two year production average from 2017 to 2018 was selected. This date range was selected since it reflects recent operational constraints due to the current condition of the City’s existing wells in this basin.

Therefore, the City’s current water supply from the Mound Basin is 1,963 AFY for calendar year 2019. The City is currently designing/constructing Mound Wells 2 and 3. Once these wells are completed, production from the Mound Basin can increase.

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.

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 has been 3,862 AFY since January 1, 2016. This equates to a reduction of approximately 29% from the previous historical baseline allocation of 5,472 AFY. The City’s allocation has been limited to 3,862 AFY.

The City may 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. 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).

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. Therefore, the City’s current water supply from the Oxnard Plain is 3,862 AFY for calendar year 2019.

5. Santa Paula Groundwater Basin (Santa Paula Basin)

As discussed in the Normal Water Supply section above, the Santa Paula Basin Judgment allows the City to utilize 3,000 AFY. No reductions to this supply is anticipated for this year; therefore, the City’s current water supply from the Santa Paula Basin is 3,041 AFY (includes City acquired water rights) for calendar year 2019.

6. Recycled Water

As stated in the 2015 Urban Water Management Plan, the City’s projected annual recycled water demand for 2019 is approximately 700 AFY. Therefore, the City’s current recycled water demand is
700 AFY for calendar year 2019.

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

### Table 4-2

**Summary of Current Water Supply 2019**

<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>Current Supply 2019 AFY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Municipal Water District [1]</td>
<td>3,763</td>
</tr>
<tr>
<td>Ventura River / Foster Park</td>
<td>2,323</td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>1,963</td>
</tr>
<tr>
<td>Oxnard Plain Groundwater Basin</td>
<td>3,862</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin [2]</td>
<td>3,000</td>
</tr>
<tr>
<td>City Acquired Water Rights [3]</td>
<td>40.9</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15,651</strong></td>
</tr>
</tbody>
</table>

[1] Demand within Casitas service area is based on the 2017 Agreement and assumes a Stage 3 demand reduction.
[2] Includes 3,000 AF of original City allocation and

In June 2018, the City Council confirmed that the City remains in a Stage 3 Water Shortage Event. Although the City recognizes that our region has received a significant amount of rainfall this winter, the above evaluation of current conditions of each water supply source along with the triggers outlined in the Water Shortage Event Contingency Plan (WSECP) indicates that the City remains in a water shortage event following consecutive years of drought. The 2015 WSECP includes stages of action to respond to water shortage events. The City developed a six-stage contingency plan to reduce demand up to 60% during a severe or extended water shortage event including both voluntary and mandatory stages. In September 2014, the City Council declared that Ventura was in a Stage 3 Water Shortage Emergency calling for 20% mandatory conservation cutback. The Stage 3 trigger indicates that annual supply projection is between 20% and 29% below normal year supply projection. The annual supply projection is from the current supply from Table 4-2 above and the normal year supply is identified from Table 4-1 of the 2013 CWRR. The WSECP noted that the baseline supply value will not change through the duration of the event. The City has remained in the current drought/shortage condition since 2014, so Table 4-1 of the 2013 CWRR is utilized for the
baseline supply value.

The annual supply projection from Table 4-2 of this report for 2019 supply drought/shortage impact is 15,651 AFY. The normal year supply projection from Table 4-1 of the 2013 CWRR is 19,600 AFY. Therefore, the annual supply projection is 20.15% below normal year supply and the City remains in a Stage 3 Water Shortage Event.

D. PROJECTED FUTURE WATER SUPPLY

The City's projected future water supply sources is evaluated through 2030 and assesses the current drought and forecasts an additional two years of drought through 2021 (for a total duration of a ten year drought). The projected future water supply also assumes that the City will revert to normal conditions in 2025 through 2030. The background for the City's projected future water supply portfolio for each source is discussed below and summarized in Table 4-3.

The City's projected future water supply will be impacted by the Sustainable Groundwater Management Act (SGMA). In September 2014, the State legislature passed the SGMA to improve management of groundwater resources in California. Groundwater Sustainability Agencies (GSAs) must be formed for regions where groundwater basins are designated medium or high priority by the Department of Water Resources (DWR). Medium or high priority ranking groundwater basins are at risk of overdraft and/or a decline in water quality. The intent of the legislation is to manage groundwater sustainably; to require reporting related to hydrogeological conditions, water balance trends, sustainable yield and beneficial uses; to prevent the deterioration of water quality and environmental damage and irreversible land subsidence; and to increase groundwater recharge and storage; amongst additional guidelines. SGMA also provides the GSA with a range of authorities including but not limited to adopting rules, regulations, ordinances, and resolutions to implement SGMA; monitoring compliance and enforcement; requiring registration of groundwater extraction wells; investigating, appropriating, and acquiring surface water rights, groundwater, and groundwater rights into the GSA; acquiring or augmenting local water supplies to enhance the sustainability of the groundwater basin; and adopting and funding a Groundwater Sustainability Plan (GSP).

GSAs have been formed for the Upper Ventura River and Mound Basins. The Fox Canyon Groundwater Management Agency (FCGMA) was named as the GSA for the Oxnard Plain Basin (designated as high-priority) and the City is participating in the development of the GSP for the Oxnard Plain Basin. The Santa Paula Basin is managed under a stipulated judgement, and is currently only subject to annual reporting requirements to DWR under SGMA. The SGMA’s impact on the City’s water supply sources is further discussed in the respective sections below.

1. Casitas Municipal Water District (Casitas)

As mentioned in the Normal Water Supply section, a Water Services Agreement between the City and
Casitas was finalized and approved by City Council in May 2017. The agreement indicates that in the event that Casitas must enact its Water Efficiency and Allocation Program (WEAP) due to a water shortage, Casitas may adjust the City’s allocation consistent with the percentage reduction for the WEAP stage.

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 582 AFY. Therefore, the anticipated future water supply from Casitas will increase by an equivalent amount, to approximately 5,491 AFY by Year 2020. Using the growth rate discussed in Section 3 and factoring in completed projects since 2014 the estimated supply from Casitas is estimated to increase by 313 AFY in year 2019. However, this supply increase is subject to a percentage reduction consistent with the WEAP stage if Casitas has declared a water shortage.

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. In March 2017, the storage in Lake Casitas was at 43.9% of capacity. In December 2018, Lake Casitas was at 30.5% capacity. Following a wet winter, Lake Casitas is currently at 43% capacity.

Casitas is currently in a Stage 3 water supply condition per Casitas Resolution No. 16-09. Although the Lake is currently slightly above 40% capacity, it is likely that Casitas will remain in a Stage 3 water supply condition. In order to be conservative, this report assumes a reduction of 30% to the City’s Casitas supply for the 2020 Supply Drought Impact and a 40% reduction for 2021.

Therefore, the City’s projected supply from Casitas for 2020 is 3,844 AFY (30% reduction) and 3,365 AFY in 2021 (40% reduction). The Casitas projected supply in 2025 and 2030 includes growth projections within Casitas’ boundaries. Therefore, the City’s projected supply from Casitas is 5,904 AFY for 2025 and 6,067 AFY for 2030.

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

Due to the continued drought conditions and heightened environmental requirements, the City’s ability to draw water from the Ventura River continues to be significantly challenged and impacted. If the current drought continues through 2021, the supplies will be further impacted. Ventura Water staff is evaluating a multi-year drought based on City Council recommendation. To determine the 2020 and 2021 supply drought impact, the average of the two most recent driest years (2015 and 2016) was used for the projections. Therefore, the projected future water supply for 2020 and 2021 from the Ventura River / Foster Park is 1,573 AFY.

As discussed above in the Normal (non-drought) Water Supply section, production wells at Foster
Park were destroyed during 2001 and 2005 storm events. These events have reduced the City’s ability to extract water from Foster Park. The 2018 Capital Improvement Program includes the Foster Park Wellfield Production Restoration project. The project involves the replacement of the destroyed wells and construction of new facilities to restore historical production capabilities of 6,700 AFY. The project is scheduled to be completed by 2025. A range of conditions was used to estimate 2025 and 2030 projected future water supply, which assumes normal conditions. The low end equals the City’s highest production value for the past 10 years (2009 to 2018), and the high end equals the expected production from the completed Foster Park Wellfield Production Restoration project in a wet year. Therefore, the projected future water supply for 2025 and 2030 from the Ventura River / Foster Park is 3,647 – 6,700 AFY.

Studies being conducted by the State Water Resources Control Board (SWRCB) and the California Department of Fish and Wildlife (CDFW), and the Groundwater Sustainability Plan for the Upper Ventura River Groundwater Basin, and pending litigation may impact the amount and/or timing of water the City is able to utilize from the Upper Ventura River watershed.

The Ventura River was identified as one of five priority stream systems in the California Water Action Plan (WAP) adopted in January 2014 by Governor Edmund G. Brown Jr. Action four of the WAP, to “Protect and Restore Important Ecosystems”, contains a sub-action that states the following:

*The State Water Resources Control Board and the Department of Fish and Wildlife will implement a suite of individual and coordinated administrative efforts to enhance flows statewide in at least five stream systems that support critical habitat for anadromous fish. These actions include developing defensible, cost-effective, and time-sensitive approaches to establish instream flows using sound science and a transparent public process. When developing and implementing this action, the State Water Resources Control Board and the Department of Fish and Wildlife will consider their public trust responsibility and existing statutory authorities such as maintaining fish in good condition.*

The SWRCB and California Department of Fish & Wildlife (CDFW) are currently working to identify potential actions that may be taken to enhance and establish instream flow for anadromous fish in the Ventura River watershed (and the other four priority watersheds). The SWRCB is developing an integrated groundwater – surface water model to provide a better understanding of water supply, water demand, and instream flow needs in the Ventura River watershed. CDFW is developing streamflow versus habitat relationships in the mainstem Ventura River, and San Antonio Creek, a primary tributary. According to these agencies, this information will be used to enhance flows in the watershed in several ways, including the development of flow criteria and identification of important flow thresholds for conservation, restoration, and protection of southern steelhead in the Ventura River watershed.

The Upper Ventura River Groundwater Basin is designated medium-priority by DWR and the Upper
Ventura River Groundwater Agency (UVRGA) has been identified as the GSA for the basin. The UVRGA was formed through a Joint Exercise of Powers Agreement (JPA) by and among Ventura River Water District, Meiners Oaks Water District, Casitas Municipal Water District, Ventura County Watershed Protection District (VCWPD), and the City. The major components of the JPA include authority, power, membership, directors, voting paradigms and financing. These items were negotiated with the assistance of the Center for Collaborative Policy and included three stakeholder meetings. In addition to representatives from each of the five member agencies, the Board of Directors includes an agricultural stakeholder director and environmental stakeholder director.

Additional information, meeting notices, and agendas are available here: http://www.uvrgroundwater.org. The UVRGA has submitted its intent to DWR to begin to development its GSP by January 1, 2022 and DWR expects this basin to reach sustainability by January 1, 2042.

In September 2014, Santa Barbara Channelkeeper filed a lawsuit against the State Water Resources Control Board (SWRCB) and the City, alleging that the City had been over-pumping water from the Ventura River. In September 2018, the City filed an amended cross-complaint bringing into the litigation all water users in the Ventura River watershed to ensure that all parties are at the table and involved in developing solutions. While the lawsuit is still pending, the City’s goal is to resolve the litigation by developing a long-term solution with local water interests to protect the watershed and those who depend on it in a comprehensive and enforceable way. This is an on-going process.

3. Mound Groundwater Basin (Mound Basin)

The City anticipates completing a study within the next year to review the perennial yield of the Mound Basin and determine if the annual average yield of the basin is still believed to be accurate.

According to the adopted 2016-2022 Capital Improvement Program, Mound Wells 2 and 3 are anticipated to come online within the next few years. Mound Well 3 is scheduled to be operational in Spring of 2020 and Mound Well 2 is anticipated to be operational in 2021. Thus, the projected water supply from the Mound Basin for the future is greater than the current 2019 supply of 1,963 AFY (discussed in the Current Supply section above). Although 2020 and 2021 future projections are evaluated under drought impact, the addition of Mound Wells 2 and 3 will help alleviate current operational constraints. Since Mound 3 is expected be operational in 2020, the 10-year average (2000 to 2009) was used to calculate the 2020 and 2021 supply numbers. Therefore, the projected future water supply for 2020 and 2021 from the Mound Basin is 4,000 AFY. To calculate the 2025 and 2030 supply numbers, the 10 year average (2000 to 2009) from the Mound Basis was also used. Therefore, the projected future water supply from the Mound Basin for 2025 to 2030 is 4,000 AFY.

The Mound Basin is designated medium-priority by DWR and the Mound Basin Groundwater
Sustainability Agency (MBGSA) has been recognized by DWR as the GSA for the basin. The MBGSA was formed through a Joint Exercise of Powers Agreement (JPA) by and among the United Water Conservation District (UWCD), the City, and the County of Ventura. In addition to representatives from each of the 3 member agencies, the Board of Directors includes an agricultural stakeholder director and environmental stakeholder director. Meeting notices, and agendas are available here: https://www.cityofventura.ca.gov/1180/Mound-Basin-GSA.

4. Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)
As discussed in the Current Water Supply section, FCGMA’s Emergency Ordinance E currently dictates the City’s groundwater allocation in the Oxnard Plain. The City’s Temporary Extraction Allocation (TEA) was set at 4,827 on July 1, 2014. However, the ordinance also established phased reductions to the TEA. As of January 1, 2016, a 20% total reduction of the TEA is in effect. The City’s allocation is 3,862 AFY until further action is taken by the FCGMA. Therefore, the projected future supply from the Oxnard Plain Basin for 2020, 2021, 2025, and 2030 is 3,862 AFY.

FCGMA and SGMA
The Oxnard Plain Basin is designated as a high priority basin by DWR. The Fox Canyon Groundwater Management Agency (FCGMA) was named as the GSA for the Oxnard Plain Basin (designated as high-priority). FCGMA released a preliminary draft GSP for the Oxnard Plain Basin for public comment in December 2017. The Board is scheduled to release a revised draft of the Oxnard Plain Basin GSP for public review in late May 2019. A final GSP must be adopted by the Board before January 2020. The FCGMA Board is considering replacing Emergency Ordinance E with a revised allocation plan before completion of the GSP. However, this allocation plan is not likely to significantly affect the City’s allocation in 2019.

5. Santa Paula Groundwater Basin (Santa Paula Basin)
As discussed in the Normal Water Supply section, the Santa Paula Basin is subject to a stipulated judgment and is managed by the Santa Paula Basin Technical Advisory Committee (TAC) with equal representation from United Water Conservation District (UWCD), the Santa Paula Basin Pumpers Association (SPBPA), and the City. The TAC is charged with establishing a program to “monitor conditions in the basin, including but not necessarily limited to verification of future pumping amounts, measurements of groundwater levels, estimates of inflow to and outflow from the basin, increases and decreases in groundwater storage, and analyses of groundwater quality.” The Judgment also allows for the development of a management plan for the operation of the basin and empowers the TAC to determine the safe yield of the basin.

In 2014, UWCD commissioned the Santa Paula Basin Hydrogeological Characterization and Safe Yield
Study. Comment letters were provided by the SPBPA and the City on two drafts of the study. In 2017, the report was finalized and concluded that the safe-yield of the Santa Paula Basin was in the range from 24,000 to 25,500 AFY (for the 1999 to 2012 base period). When it was submitted to the Court, it included the following commentary: “The TAC does not perceive potential adverse impacts to the Basin as an immediate concern for several reasons. First, pumping levels have been steady at an extraction rate of approximately 25,500 AFY for many years and there is no evidence that cumulative production from the Basin will expand substantially in the near future. Second, the TAC members, in coordination with other Basin stakeholders, are pursuing opportunities for yield enhancement as discussed in the Projects Study. Finally, the TAC has also formed a technical work group to identify specific Basin conditions (e.g., water levels in key monitoring wells), which if observed (i.e., “triggered”) would cause the TAC to recommend reductions in allowed pumping to ensure that the health of the Basin is not degraded.”

If basin conditions change, then the City may have reductions in pumping allocations. Stage 2 reduces the City’s pumping to 1,141 AFY, Stage 3 reduces the City’s pumping allocations to 641 AFY, Stage 4 reduces the City’s pumping allocations to 481 AFY and Stage 5 reduces the City’s allocations to zero. Currently, the TAC is working on various basin management measures, including potential triggers for the above stages and potential projects to enhance the sustainable yield of the basin.

Based on recent work completed by the technical working group regarding conditions in the Basin, it is projected that no Stage reductions will be implemented even if the drought remains in effect through 2021. It is also projected that under normal conditions in 2025 to 2030, that the allocation will remain at 3,000 AFY. Additional water rights of 40.9 AF total were acquired for the past development of Tract 4632 (5.8 AF) and development of Phase I of Tract 5632 (12 AF) and Tract 5774 (23.1 AF).

Therefore, the projected future water supply in 2020, 2021, 2025 and 2030 is 3,000 AFY for the original City allocation and 40.9 AFY for City acquired water rights.

**Santa Paula Basin and SGMA**

The Santa Paula Basin is largely exempt from SGMA because a stipulated judgment among three parties, including the City, already manages it. The Santa Paula Basin is considered adjudicated, which means that groundwater allocations and extraction rights are already determined.

6. **Recycled Water**

The estimated anticipated future water supply for recycled water is based on the 2015 Urban Water Management Plan projections for recycled water.

7. **VenturaWaterPure**

The City’s Ventura Water Reclamation Facility (VWRF) treats the wastewater generated by the City’s 30,000 homes and businesses to stringent standards before releasing the tertiary treated effluent to
the Santa Clara River Estuary (SCRE) with approximately 700 acre-feet per year (AFY) diverted as recycled water for landscape irrigation by several users. This water is regulated with a permit issued by the Los Angeles Regional Water Quality Control Board (RWQCB or Regional Board), which is renewed every five years.

In 2015, the City initiated a pilot project to test the feasibility of constructing an advanced water purification facility (AWPF) to maximize quantity and reliability of potable supplies by purifying tertiary treated effluent produced by the VWRF and optimizing its potable reuse, rather than discharging into the SCRE. The pilot facility operated for 9 months and produced favorable results, indicating highly reliable purification technologies, providing information on operational needs and costs, and the absence of risk to public health and safety. As a result, the City is proposing to construct a full-scale AWPF.

The City of Ventura is currently in the planning phases for the proposed VenturaWaterPure Project which includes additional diversion of tertiary treated effluent to a new proposed Advanced Water Purification Facility (AWPF) for potable reuse. Potable reuse is the proven use of recycled water to supplement drinking water supplies. After years of special studies, environmental assessment, demonstration facility testing, and stakeholder meetings, the City determined the best way to enhance environmental protection while improving local water quality and supply reliability is to divert highly treated wastewater discharges for reuse. The final product of this state-of-the-art AWPF would be a new, locally owned source of highly purified drinking water that provides Ventura with a long-term drought resilient water supply solution. On March 6, 2019, the City released the Ventura Water Supply Projects Draft Environmental Impact Report for public review and written comment. Upon completion of the environmental review process, the next steps include permitting, final design, and bidding for construction.

One objective of the VenturaWaterPure Project is to protect the ecology of the SCRE. The City is party to a Consent Decree (The Tertiary Treated Flows Consent Decree and Stipulated Dismissal with the Wishtoyo Foundation Ventura Coastkeeper, Heal the Bay filed with the U.S. Central California District Court February 3, 2012, executed among the City, the Wishtoyo Foundation/Ventura Coastkeeper, and Heal the Bay) for the protection of the SCRE. The Consent Decree expresses the City’s commitment to pursue “environmentally protective, sustainable, and integrated water supply and wastewater discharge practices. . . [including] infrastructure options for Ventura’s reclamation and diversion of an ecologically appropriate volume” of tertiary-treated flows produced by the existing VWRF and currently discharged to the SCRE. The Consent Decree requires such diverted flows to be dedicated to “water reclamation uses,” including local water supply augmentation to the maximum extent feasible.

The City has conducted extensive analysis of the SCRE, including estimated ecological effects of reduced discharges on the SCRE. This analysis is compiled in several reports and reviews mandated by the Consent Decree, including the Phase 1, 2, and 3 Studies, the Technical Review Team (TRT)
Report, the Scientific Review Panel (SRP) Final Report, and the TRT review supporting the conclusions and recommendations in the SRP Final Report. The findings of the reports and reviews are discussed in detail in Section 1.6 of the Draft EIR and the analysis was used to support a proposed diversion volume and continued discharge level. The SRP Final Report (supported by the TRT Review) recommends a Continued Discharge Level (CDL) range of 0 – 0.5 MGD (on an average annual basis) during closed berm conditions. This conclusion was founded on the beneficial effects of discharge reduction to ecological conditions.

Since the publication of the SRP Final Report, the City has met with and received feedback on the proposed projects from state and federal wildlife agencies. Based on the scientific record and feedback from the agencies, the City is proposing additional phasing to the implementation approach that would commit to a CDL of 1.9 MGD by the end of year 2025, with a planned reduction to a CDL of 0 to 0.5 MGD during closed berm conditions by the end of year 2030. This phased implementation approach is the basis of the proposed project’s designed flow rate and minimum treatment capacity. The proposed timeline for the completion of the VenturaWaterPure Project is illustrated in Figure 4-2.

Based on the completion of the Special Studies and additional assessments detailed in the Draft EIR, the future water supply provided by the VenturaWaterPure Project is projected to be 2,800 AFY in 2025 and 2,800 AFY to 4,000 AFY in 2030.

9. State Water Project

The City has a 10,000 acre-foot per year entitlement from the California State Water Project (SWP). The base contractual agreements concerning the City’s annual entitlement to 10,000 acre-feet of SWP are: (1) the 1963 State Water Supply Contract of 20,000 acre-feet entitlement of SWP water between the Department of Water Resources (DWR) and Ventura County Watershed Protection District (VCWPD) known formerly as Ventura County Flood Control District (VCFCD); (2) the 1970 agreement between VCFCD and Casitas known formerly as the Ventura Municipal Water District that assigned the 20,000 acre-feet entitlement to Casitas; and (3) the 1971 agreements between Casitas and the City providing the City with an annual entitlement of 10,000 acre-feet and Casitas and United
providing United with an annual entitlement of 5,000 acre-feet.

In the contract with Casitas, the City retains full authority and responsibility for determining the point and method of delivery of the allocation. To date, the City has not constructed the improvements necessary to receive direct delivery of its allocation.

The City pays annual SWP Table A water fees to DWR, which cover construction costs for SWP facilities and administration to deliver allotments of water throughout the state. In addition, the citizens of Ventura participated in an advisory vote on November 3, 1992 and selected desalinating seawater over importing water through the SWP, as the preferred supplemental water supply option. However, based on the City Attorney Office's review of the City's SWP Table A water, the City cannot unilaterally end its involvement in the SWP's financial obligations and SWP Table A water without great risk.

The Monterey Amendment to the State Water Contract in 1999 provided the City a formal mechanism to allow the City to place their SWP water into a "turn back" pool to be purchased by other SWP contractors. The City has taken part in the SWP "turn back" pool over the past several years which has provided a small annual revenue offset. The City has also worked recently with United who requested to receive the City's allocation at the "turn back" pool rate which provided water benefits to the County area as a whole.

On January 23, 2017, City Council authorized an alignment study by Kennedy/Jenks to determine how the interconnection project can be designed and operated to supply water to serve the regional needs of the City, Calleguas, Casitas Municipal Water District (Casitas), and United Water Conservation District (United). The final alignment study was completed in 2018, and the environmental review process pursuant to CEQA has commenced.

On February 28, 2018, the City issued the Notice of Preparation of a Draft Environmental Impact Report (EIR) for the State Water Interconnection Project (NOP). A Draft EIR was prepared to evaluate the potential environmental impacts associated with construction and operation of the Interconnection Pipeline and associated facilities. The Draft EIR has been completed and was circulated for a 45-day public review period on February 19, 2019. As stated in the Draft EIR, the project will enable delivery of SWP water by wheeling through Metropolitan Water District of Southern California and Calleguas to the City. The connection will also facilitate direct delivery of SWP water to United and direct or in-lieu delivery of SWP water to Casitas. In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of its imported water supplies. The interconnection will be a pipeline used to transport water between Calleguas' and the City's distribution systems. The pipeline will be approximately 7 miles in length originating in the eastern portion of the City, traversing southerly and easterly through unincorporated Ventura County, to the southwestern end of the City of Camarillo.
As stated in the Draft EIR, “The proposed State Water Interconnection Project is not anticipated to provide any increased water supply volume for the City. However, the project would improve system reliability by providing access to a replacement supply source for the water supplies that have been reduced or have otherwise become less available. It also could meet a necessary requirement for the VenturaWaterPure Project, since the City may need to demonstrate an available backup supply in order to receive certain State approvals. Additionally, SWP water is a near-term option for providing the necessary water to dilute high TDS levels in groundwater to improve system water quality.”

Benefits to the City include making up for losses in annual yield from existing supply sources (Lake Casitas, Ventura River, and groundwater), improving water quality, and providing an emergency/backup supply for Ventura Water’s proposed potable reuse project, VenturaWaterPure. These operational details will be developed through the project design and planning process and negotiations with project partners. These details will be reflected in future CWRRs when available.

While the City’s water supply contract for SWP water provides the City with a maximum annual allocation of 10,000 AF, the actual allocation of available water is set by California Department of Water Resources (DWR) annually. DWR allocations are finalized in the Spring of each year and consider the following:

- hydrologic conditions
- existing storage in reservoirs
- operational and regulatory constraints
- contractor demands

Based on historical allocations the range of available SWP water has been 5% to 100% over the last 25 years. However, the running average continues to decline. Given the uncertainty of SWP deliveries and the fact that capacity in MWD and Calleguas’ systems must be available in order for water to be wheeled to the City, a range of zero to full allocation of the City’s entitlement was selected for 2025 and 2030 projected supplies. Therefore, the projected available water supply in 2025 and 2030 for SWP water delivered by the State Water Interconnection Project is estimated to be 0-10,000 AFY.

The City’s projected future water supply portfolio is summarized in Table 4-3.
<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>Existing Normal Supply</th>
<th>2019 Supply Drought Impact (AF)</th>
<th>2020 Supply Drought Impact (AF)</th>
<th>2021 Supply Drought Impact (AF)</th>
<th>2025 Normal Supply (AF)</th>
<th>2030 Normal Supply (AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Municipal Water District</td>
<td>5,375</td>
<td>3,763</td>
<td>3,844</td>
<td>3,365</td>
<td>5,904</td>
<td>6,067</td>
</tr>
<tr>
<td>Ventura River / Foster Park</td>
<td>4,200</td>
<td>2,323</td>
<td>1,573</td>
<td>1,573</td>
<td>3,647 – 6,700</td>
<td>3,647 – 6,700</td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>4,000</td>
<td>1,963</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Oxnard Plain Groundwater Basin</td>
<td>4,100</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Original City Allocation</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
</tr>
<tr>
<td>City Acquired Water Rights</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>865</td>
<td>112</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,800</td>
<td>2,800-4,000</td>
</tr>
<tr>
<td>Ventura Water Pure</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>21,415</td>
<td>15,651</td>
<td>17,020</td>
<td>16,541</td>
<td>23,954-27,007</td>
<td>24,282-28,535</td>
</tr>
</tbody>
</table>

Note: Projected supply values do not take into account water quality for all sources or account for loss of one source.

1. None of these numbers preclude the City’s water rights.
2. 30% drought impact based on 2017 agreement with Casitas.
3. Projects that Casitas will declare Stage 4 (40% reduction) if the drought continues to 2021.
4. Casitas future supply is adjusted as demand increases within the Casitas service area based on the absorption rate in Table 3-8.
5. 5 year production average from 2014-2018.
6. Average of 2 most recent driest years (2015-2016).
7. Based on the highest City production value in the past 10 years (2008-2017) and the intent of the City to restore production to the historical levels by 2025.
8. Two year average production (2017-2018).
9. Ten year average production (2000-2009); operational limitations removed once replacement wells come online.
10. 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 AF.
11. The Santa Paula Basin Judgment allows the City to utilize on average 3,000 AF annually.
12. Water rights acquired for the past development of Tract 4632 and development of Phase 1 of Tract 5632 and Tract 5774.
14. Low range reflects potential limitations in wheeling capacity and uncertainty of SWP deliveries. High range assumes full allocation of the City’s 10,000 AF per year entitlement. The average allocation from 2013-2018 was 39%.
E. POTENTIAL ADDITIONAL FUTURE SUPPLY SOURCES

This section will briefly describe any additional planned or proposed projects which may affect the water supply sources for the City.

1. **Ocean Desalination**

In 2013, City staff was engaged in discussions with local water agencies in regard to potential regional desalination projects. In the City’s 2015 UWMP, seawater desalination was included as a potential future part of the City’s long term water supply portfolio and as an additional emergency water supply during times of drought. The desalination facility would be designed with a delivery capacity of up to 2.7 million gallons per day or 3,000 AFY. In 2016, as part of the development of the Water Rights Dedication and Water Resource Net Zero Fee Ordinance and Resolution (see Section 5 Programs and Policies), the “Evaluation of a Water Resource Net Zero Fee Report” was prepared dated May 11, 2016 by Water Consultancy. The report describes potential additional water supplies identified in the City’s Capital Improvement Program (CIP). At this time, Project 74070 Advanced Wastewater Treatment Plant Land Acquisition is listed in the City’s Adopted 2016-2022 CIP. The land acquisition is for the expansion of the City’s water supply for the construction of potential advanced water purification facilities for potable reuse and/or desalination. The project’s time schedule includes planning from 2016 through 2019.

According to the Draft Ventura Water Supply Projects Environmental Impact Report released on March 6, 2019, if sufficient water is not available from the diversion of discharges to the SCRE, then the City may need to develop desalination facilities to meet 2035 water supply needs. Phase 2 of the proposed projects would augment water supplies to meet future water needs, including the accommodation of planned growth, either through increasing the amount of recycled water produced, or construction of an ocean desalination facility. This would be accomplished through either the expansion of the AWPF as a first option pending regulatory approvals, or, if this option is not approved or does not meet the City’s water supply needs, through construction of an ocean desalination facility. Since details of the ocean desalination project is in a preliminary stage, ocean desalination is identified as a potential additional future supply source.
5. PROGRAMS AND POLICIES

A. INTRODUCTION

In recent years, the City has faced consecutive years of persistent drought conditions. The previous Water Supply section shows that the City currently relies exclusively on local water supplies. The local water supplies are impacted by local rainfall, environmental factors, regulatory factors, operational factors, and legal constraints. Water conservation measures in addition to other policies assist the City in reducing its water demands. The following sections highlight the various programs and policies that have been enacted in previous years which enable the City to continue to provide reliable water sources to customers.

1. Water Conservation Measures/Water Efficiency Plan

Water conservation measures help to sustain our life source for future generations. In September 2011, City Council adopted a five-year Water Efficiency Plan which outlined existing programs and potential programs to engage customers in the pursuit of greater water efficiency. The Water Efficiency Plan focused on efforts including customer and student outreach, reducing outdoor landscape watering, optimizing operational practices, and expansion of recycled water usage. Staff continues to implement programs beyond the duration of the plan. In February 2014, in response to the current drought, City Council approved a voluntary 10% conservation cutback for Ventura customers. Subsequently, in September 2014, the City Council declared that Ventura was in a Stage 3 Water Shortage Emergency calling for 20% mandatory conservation cutback as local water supplies continued to drop during the third year of California's historic drought.

In May 2016, Governor Brown issued Executive Order B-37-16, “Making Water Conservation a California Way of Life”, which directed State agencies to establish a long term framework for water conservation and drought planning with four primary objectives: 1) use water more wisely, 2) eliminate water waste, 3) strengthen local drought resilience, and 4) improve agricultural water use efficiency and drought planning.

In April 2017, the Governor issued Executive Order B-40-17, which lifted the emergency drought declaration, retained prohibitions on wasteful practices, and advanced measures to implement “Making Water Conservation a California Way of Life.” Proposed legislation to implement the conservation framework was introduced in 2017. Two key long term conservation bills, Assembly Bill 1668 and Senate Bill 606, were signed into law on May 31, 2018.

Although the emergency drought declaration was lifted for the State in April 2017, City Council confirmed that the City remained in a Stage 3 Water Shortage Event in June 2018. Despite the Governor’s lifting of the State emergency drought declaration, the goals and objectives of “Making Water Conservation a
California Way of Life” remain consistent with the City’s ongoing water shortage response and future planned efforts.

The City offers a variety of conservation programs designed to help customers achieve voluntary and mandatory water usage reductions established locally and by the State.

Current programs include the following:

- **Mobile Reuse Program** – In June 2016, the City launched a program which provides high quality recycled water for local residents and commercial businesses. The recycled water can be picked up at the Fill Station located at the Ventura Water Reclamation Facility. Residents and City Parks and State Parks utilize the water for landscape irrigation while AERA Energy and Ventura County Transportation Department utilize the water for dust control. In 2018, a total of 4,728,702 gallons (14.52 acre-feet) of recycled water was served from the Fill Station. Benefits of the program included expanded recycled water usage in the City and conservation of potable water.

- **Water Wise Incentive Program** - Since 2015, the City has offered rebates to qualifying customers who replace their lawn with a water wise landscape. Since the project’s inception, approximately 500 projects have been completed with more than 572,844 square feet of turf removed, resulting in a projected water savings of 27.17 AFY.

- **High Efficiency Sprinkle Nozzles** - Beginning in 2016, Ventura Water has offered free high efficiency sprinkler nozzles to residential and commercial customers. As of December 2018, approximately, 6,498 sprinkler nozzles have been installed for an estimated water savings of 38.64 AFY.

- **Weather-Based Irrigation Controllers (WBIC)** - In June 2017, staff launched a Smart Irrigation Controller program. Qualifying customers received a free WBIC, professional installation of the unit, and on-site training. The program had a tremendous amount of participation. In March 2018, City Council approved additional funds to continue the program. As of December 2018, over 300 smart controllers have been installed for an estimated water savings of 8.69 AFY.

- **Water Efficiency Surveys (Water Audits)** - Since 2014, residential and commercial customers can request a free water efficiency survey, which includes investigating water use, detecting leaks, and educating customers on best practices for indoor and outdoor water efficiency. As of December 2018, over 500 surveys have been conducted across the City.

In addition to customer conservation programs, the City has implemented capital improvement projects and state of the art technologies designed to conserve water and improve water efficiency. In July 2017, Ventura Water began operating the Neutral Output Discharge Elimination System (NO-DES) unit for water distribution system flushing. Rather than flushing water out of the distribution system, the NO-DES truck circulates the water, filters it and puts it back into the system. The NO-DES truck is an innovative water
saving tool for the community.

In October 2018, the Ventura Water launched the Advanced Metering Infrastructure (AMI) Project which includes replacing approximately 32,000 manually-read water meters with smart meters over a three-year period. As of December 2018, over 3,200 meters have been upgraded. Benefits of AMI include advanced leak detection notification capabilities, enhanced accuracy in data and improved customer service.

2. 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 reduced water supplies due to the prolonged drought. The Task Force addressed revisions to the City’s Water Shortage Event Contingency Plan (below), 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.

In June 2015 Council approved the four-tiered (drought) water rate structure recommended by the Task Force that sends a strong message for conservation of Ventura’s local resources. The rates increased to achieve full revenue recovery within each tier or customer class, and by doing so, further encourage conservation.

3. Water Shortage Event Contingency Plan

It was proposed at the July 7, 2014 City Council Meeting that the existing Water Shortage Event 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 Event 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.

The Water Shortage Event Contingency Plan (WSECP) includes stages of action to respond to water shortage events. A water shortage event can be a single occurrence as short as twenty-four hours to a multi-year weather condition. Other events, besides drought, that could trigger a water shortage event include an earthquake, water system failures, fire, contamination, regional power outage, State restrictions
or other causes. The WSECP provides the following definition as written by the California Department of Water Resources:

*Defining when drought occurs is a function of drought impacts to water users. Drought can best be thought of as a condition of water shortage for a particular user in a particular location. Hydrologic conditions constituting a drought for water users in one location may not constitute a drought for water users in a different part of California or for users with a different water supply. Individual water suppliers may use criteria such as rainfall/runoff, amount of water in storage, or expected supply from a water wholesaler to define their water supply conditions.*

*Drought is a gradual phenomenon. Although persistent drought may be characterized as an emergency, it differs from typical emergency events. Most natural disasters, such as floods or forest fires, occur relatively rapidly and afford little time for preparing for disaster response. Droughts occur slowly, over a period of time. There is no universal definition of when a drought begins or ends. Impacts of drought are typically felt first by those most reliant on annual rainfall – ranchers engaged in dryland grazing, rural residents relying on wells in low-yield rock formations, or small water systems lacking a reliable water source. Criteria used to identify statewide drought conditions do not address these localized impacts. Drought impacts increase with the length of a drought, as carry-over supplies in reservoirs are depleted and water levels in groundwater basins decline.*

The Department of Water Resources most recently defined “drought condition” as “hydrologic conditions during a defined period, greater than one dry year, when precipitation and runoff are much less than average” (see Glossary in Section 1F).

The City developed a six-stage contingency plan to reduce demand up to 60% during a severe or extended water shortage event including both voluntary and mandatory stages. As mentioned in Section 5. Water Conservation Measures/Water Efficiency Plan, in September 2014, the City Council declared that Ventura was in a Stage 3 Water Shortage Emergency calling for 20% mandatory conservation cutback. The Stage 3 trigger indicates that annual supply projection is between 20% and 29% below normal year supply projection. The annual supply projection of 15,651 AF is from Table 4-2 of the current CWRR and the normal year supply of 19,600 AF is identified in Table 4-1 of the 2013 CWRR (below). The WSECP noted that the baseline supply value will not change through the duration of the event. Therefore the annual supply projection is 20.15% below normal year supply and the City remains in a Stage 3 Water Shortage Event. The City has remained in the current event since 2014, so Table 4-1 of the 2013 CWRR (below) is utilized for the baseline supply value.
4. Establish Water Rights Dedication and Water Resource Net Zero (In Lieu) Fee Ordinance and Resolution

In September 2012, Ventura Water took the concept of a water rights ordinance to Council. 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 can receive credit for the water savings, and thereby reduce the in-lieu fee they would 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. The Water Commission worked diligently on the draft Water Rights Dedication and Water Resource Net Zero Fee Ordinance and Resolution (“Ordinance”) from September 2015 to March 2016. The Water Commission approved a final draft at the March 22, 2016

### Table 4-1
Summary of Current Water Supply (from 2013 CWRR)

<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>Current Supply (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Municipal Water District</td>
<td>5,000 [1]</td>
</tr>
<tr>
<td>Ventura River / Foster Park</td>
<td>4,200</td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>4,000</td>
</tr>
<tr>
<td>Oxnard Plain Groundwater Basin</td>
<td>4,100</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin</td>
<td>1,600</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>700</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19,600</strong></td>
</tr>
</tbody>
</table>

[1] Demand within Casitas service area is approximately 5,000 AFY at this time.
meeting for recommendation to Council in April 2016.

Public meetings on the draft Ordinance were held April 2016 through June 2016 with the Chamber of Commerce Group, City Planning Commission, Midtown Community Council, Building Industry Association (BIA) and developers, Eastside Community Council, and Westside Community Council. On June 6, 2016, City Council voted 6-1 to adopt the Ordinance and Resolution. On August 11, 2016, the Ordinance became effective and requires all new and intensified development to offset the demand associated with its impact on the water system. The Ordinance does not apply to projects for which entitlements have been approved or building permits issued prior to the effective date of the Ordinance. Funds collected through the implementation of this Policy will be utilized to fund future water supply projects.

5. 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 further amended the ordinance in May 2015 and a seven member Water Commission with two alternate members was formed as part of Ventura Water’s ongoing public outreach and education effort, and to help with long term planning.

The Water Commission reviews and makes advisory recommendations regarding water rates, water resource infrastructure projects in the five-year capital improvement program, the integrated water resource management plan, water supply options, the Urban Water Management Plan approval process, a water dedication and net zero fee requirement, and other water resources issues.

The Water Commission has reviewed and discussed the following general topics noted below as well as many specific topics since their initial meeting in June 2015 through December 2018.

- Santa Clara River Estuary Studies
- Water Wise Incentive Programs
- Public Outreach Program
- Sustainable Groundwater Management Act (SGMA)
- Overview of Local Groundwater Basins
- Model Water Efficient Landscape Ordinance
- Upper Ventura River GSA
- Mound Basin GSA
- Recycled Water Program
- Urban Water Management Plan
- Drought Update
- Public Outreach Programs
• Recycled Water Mobile Reuse
• Ocean Desalination
• Ventura Water Reclamation Facility Evaluation
• Water Rights Dedication and Water Resource Net Zero Policy
• Status on the Santa Paula Basin
• State Water Interconnection Project
• Community Development Update
• Drought and Water Shortage Update
• Water and Wastewater Rate Study
• Groundwater Sustainability Agencies
• Capital Improvement Program for Water and Wastewater Projects
• Operations and Capital Expenditure Requirements
• Brown Act Training and Water Commission Rules of Procedure
• Thomas Fire – Billing Policies and Recovery
• State Water Entitlement
• Regulatory and Legislative Impacts
• Potable Reuse
• State Water Contract and California WaterFix
• Water Loss Audits
• Advanced Metering Infrastructure
6. **CONCLUSIONS & DISCUSSION**

A. **CONCLUSIONS**

The City’s total water demand for the most recent calendar year (2018) was 14,211 AFY. Over the past five years (2014-2018), the City experienced an average annual water demand of 14,727 AFY, and over the past ten years (2009-2018), the annual average water demand was 16,035 AFY. In the previous 2013 to 2016 CWRRs, the most recent 5-year average was used as the baseline demand condition. However, it was recommended in the 2016 CWRR that the City reconsider using the 5-year average and use the 10-year average in the 2017 CWRR. Thus, the 2017, 2018, and 2019 CWRRs utilize the 10-year average demand. Utilizing the previous 10-year City annual average, the baseline water demand for the 2019 CWRR is 16,035 AF, a decrease of 480 AF from the 2018 CWRR baseline water demand of 16,515 AF. This continued decrease is likely a result of: (1) approved water rate increases; (2) the June 2015 City Council approval of a four-tiered (drought) water rate structure; (3) the February 2014 City call for 10% voluntary conservation; and, (4) the September 2014 City declaration of a Stage 3 Water Emergency requiring customers to reduce their use by 20% due to the prolonged drought.

The City has a total of 53 projects that are under construction or approved for development. These projects include an additional 491,276 SF of non-residential development and 3,417 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 1,346 AFY. Therefore, the estimated water demands total 17,402 AFY. This report assumes that the currently under construction and approved projects will be completed by year 2023.

The 2019 CWRR projects out the demands to the Year 2030 which is beyond the year that the approved projects would be fully vested. In order to project out the estimated demand for the Years 2024 through 2030 an approximate growth rate of 0.54% (Per City Planning Department based on the Department of Finance historical data for population) was used to estimate the increase in demand from the time all approved projects were fully vested (Year 2023) to the Year 2030.
The City’s projected available water supply is constantly changing, depending upon environmental, regulatory, operational, and legal constraints. The City’s normal year water supply is 21,415 AFY; however, the available water supply is estimated at 15,651 AFY in 2019.

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 582 AFY by 2023 (as calculated in Table 3-6) to meet the additional water demand in the Casitas boundary.

Table 6-1 provides a comparison of the existing water demand and supply, and the near-term water demand and supply. While the projected water supply in a 2019 and 2021 drought scenario is less than the projected demand, it should be noted that demand during drought periods has been less than projected in recent years.

The water supply range and demand projections are also depicted graphically in Figure 6-1.
<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Demand AFY</th>
<th>Projected Drought Demand [^1] AFY</th>
<th>Projected Normal Demand [^2] AFY</th>
<th>Projected Supply [^3][^5]</th>
<th>% Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>14,262</td>
<td>17,111</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>13,973</td>
<td>16,515</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>14,211</td>
<td>16,035</td>
<td>15,321</td>
<td>-4.5%</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>12,958</td>
<td>16,304</td>
<td>-4.0%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td>13,067</td>
<td>16,573</td>
<td>2.7%</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td>13,178</td>
<td>16,842</td>
<td>-1.8%</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td>17,112</td>
<td>20,974</td>
<td>18.4%</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td>17,381</td>
<td>21,091</td>
<td>17.6%</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td>17,475</td>
<td>21,122</td>
<td>17.3%</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td>17,571</td>
<td>23,954 - 27,007</td>
<td>26.6% - 34.9%</td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td></td>
<td>17,666</td>
<td>23,987 - 27,040</td>
<td>26.4% - 34.7%</td>
<td></td>
</tr>
<tr>
<td>2027</td>
<td></td>
<td>17,763</td>
<td>24,019 - 27,072</td>
<td>26.0% - 34.4%</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td></td>
<td>18,055</td>
<td>24,282 - 28,535</td>
<td>25.6% - 36.7%</td>
<td></td>
</tr>
</tbody>
</table>

\[^1\] Projected Drought Demand equals a 20% reduction (Stage 3 mandatory conservation) of the calculated projected water demand described above.
\[^2\] Per Table 3-8.
\[^3\] Per Table 4-3.
\[^4\] Projected Normal Demand using approximately .54% growth rate to 2030. The approximately 0.54% growth rate per City Planning Department's data was used to estimate the increase in demand.
\[^5\] Percent differences calculated between projected normal demand and the high and low supply range.
Figure 6-1: Near-term Demand vs. Supply Comparison

- **Projected Drought Demand**
- **Projected Normal Demand**
- **Projected Drought Supply**
- **Actual Demand**
- **2013 Normal Supply**
B. DISCUSSION

The results of this Report indicate that, in the near term, the spread between the current water demand and the current water supply is very tight. If the continued drought condition persists, the supply could be less than the demand. The City’s customers will need to continue to conserve and/or pay penalties for overuse of the City’s water supply sources while the City secures new water supplies. This presents short-term challenges for the City as it continues to allocate water supply to development projects that will generate additional water demands. The City will continue to perform the following on an annual basis and publish the results in the annual Comprehensive Water Resources Report:

1. Provide total water consumption for the previous calendar year.
2. Re-calculate the 3-year, 5-year and 10-year water consumption averages.
3. Update the water supply portfolio.
4. Update the existing land use data.
5. Evaluate all future development projects based on current supply and demand conditions.
6. 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.
7. Continue to develop water supply through demand side management, secure water rights, administer the Water Rights Dedication and Water Resource Net Zero Ordinance approved in July 2016 and continue to integrate the new water supply sources into the City’s water supply portfolio.

The City has always worked to address long-term water demands with effective planning and development of additional future water supplies. As discussed in Section 4 of this report, the City currently has two proposed water supply projects in the planning stages: VenturaWaterPure and the State Water Interconnection Project. These two proposed projects together would ensure that the City has adequate supplies for future demand under various climatic conditions. In planning for these projects, the City must consider the uncertainty in both the demand projections and the supply projections.

Current demand projections assume that the conservation that has occurred during the multi-year drought that began in 2013 will continue into the future. While the City continues to encourage conservation and the State has passed legislation to encourage “conservation as a way of life”, the City has limited control over the amount of water its citizens utilize. The effects of conservation on water demand projections are illustrated in Table 6-2 which compares the long-
term demand projections from this report with those included in the 2015 Urban Water Management Plan.

Table 6-2
Comparison of Demand Projections (AF)

<table>
<thead>
<tr>
<th>Document</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 UWMP</td>
<td>20,245</td>
<td>20,930</td>
<td>21,512</td>
</tr>
<tr>
<td>2019 CWRR</td>
<td>16,573</td>
<td>17,571</td>
<td>18,055</td>
</tr>
</tbody>
</table>

The supply projections presented in Table 6-1 and Figure 6-1 only project supplies for normal years after 2021. Table 6-3 summarizes the uncertainty and sensitivity to climate variations of each water supply source. The purpose of this table is to illustrate that the City's water supplies are vulnerable to many factors outside of the City’s control. Consequently, water supply projections past 2021 are highly uncertain. Table 6-4 presents additional water supply scenarios to illustrate the vulnerability of the City’s existing water supplies and how the water supplied by the proposed State Water Interconnection and VenturaWaterPure projects would be utilized to meet water demands in the future. Figure 6-2 illustrates the potential future water supply scenarios presented in Table 6-4.
Table 6-4: CITY OF VENTURA WATER SUPPLY SOURCES - POSSIBILITIES, CHALLENGES AND UNCERTAINTIES

<table>
<thead>
<tr>
<th>Supply Component</th>
<th>Range of Available Data (Years)</th>
<th>Historical Range (AFY)</th>
<th>Minimum Estimated Supply Volume (AFY)</th>
<th>Maximum Estimated Supply Volume (AFY)</th>
<th>Percent of Supplier</th>
<th>Potential Climate Change Impacts</th>
<th>Sensitivity to Annual Variations in Precipitation</th>
<th>Potential Opportunities to Increase Supply</th>
<th>Potential Costs</th>
<th>Infrastructure Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danford Plan Groundwater Basin</td>
<td>1962-2018</td>
<td>3023-6,177</td>
<td>3,862</td>
<td>3,862</td>
<td>Current</td>
<td>Supply reflects current allocation to Fox Airport Groundwater Management Agency (FAGMA). Allocation will be refined in the next year as the Groundwater Sustainability Plan (GSP) is completed. Sustainable yield of the basin will be established utilizing historical hydrology and historical pumping. Groundwater Sustainability Plans are required to consider impacts related to climate change when establishing sustainable yield. Not sensitive - City is allocated a portion of basin sustainable yield which normalizes annual fluctuations in precipitation. Limited - Initial allocation may be higher, but will likely decrease annually over the next 20 years. Water supply projects funded and constructed through the ESGMA could increase allocations. Future trading program could allow the City to buy or sell annual allocations. Continued maintenance and replacement of groundwater wells.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin</td>
<td>1962-2018</td>
<td>0-3,096</td>
<td>1,182</td>
<td>3,041</td>
<td>Current</td>
<td>Supply reflects current allocation according to court stipulated judgment. Santa Paula Basin Technical Advisory Committee (TAC) is charged with establishing a program to “monitor conditions in the basin, including but not necessarily limited to verification of future pumping amounts, measurements of groundwater levels, estimates of flow to and outflow from the basin, increases and decreases in groundwater storage, and analyses of groundwater quality.” The judgment also allows for the development of a management plan for the operation of the basin and empowers the TAC to determine the safe yield of the basin. Not sensitive - City received an annual allocation of groundwater according to the Judgment. Limited - &quot;Adjacently&quot; basins, would require assessment of basin safe yield. Allocations could decrease if triggers are met due to extended dry conditions. Allocation is based on a rolling 7-year running average, so City could pump additional water in some years. Continued maintenance and replacement of groundwater wells.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>1982-2018</td>
<td>213-5,546</td>
<td>1,963</td>
<td>4,000</td>
<td>The Mound Basin Groundwater Sustainability Agency (MBGSA) will determine the sustainable yield of the basin through the GSP development process. Sustainable yield of the basin will be established utilizing historical hydrology and historical pumping. Groundwater Sustainability Plans are required to consider impacts related to climate change when establishing sustainable yield. Not sensitive - City will be allocated a portion of basin sustainable yield which normalizes annual fluctuations in precipitation. Possible - The sustainable yield for the basin has not yet been determined. The MBGSA will likely develop allocations of sustainable yield through its GSP development process. Continued maintenance and replacement of groundwater wells. Two replacement wells are currently being designed/constructed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Groundwater</td>
<td>2000-2018</td>
<td>7,007</td>
<td>18,006</td>
<td>27,000</td>
<td>The SIVCA and California Department of Fish &amp; Wildlife (CDFW) are currently working to identify potential actions that may be taken to enhance and establish instream flow for anadromous fish in the Ventura River watershed. This effort could result in the development of flow criteria for the River. The City is currently working to resolve litigation regarding its use of the River through a collaborative settlement process. Most climate change predictions call for more intense rainfall, although not necessarily more rainfall. This may allow increased pumping/diversions during certain rainfall events while still meeting instream flow requirements. Increased frequency and duration of through periods could also reduce available supplies. Very Sensitive - River flows are directly related to the amount of annual rainfall. Possible - Rebuild Water Crisis Facility would allow increased demand and increase from current. Long-term objective to increase to 3,000 AFY in wet years. Needed - rebuild/replace extraction facilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foster Park</td>
<td>1933-2018</td>
<td>1,293-9,874</td>
<td>1,573</td>
<td>6,700</td>
<td>10-17%</td>
<td>Fish Passage and Habitat Considerations have reduced allowable diversions from Ventura River. Fish Passage and Habitat Considerations have reduced allowable diversions from Ventura River. Most climate change predictions call for more intense rainfall, although not necessarily more rainfall. This may allow increased pumping/diversions during certain rainfall events while still meeting instream flow requirements. Increased frequency and duration of through periods could also reduce available supplies. Sensitive - Available supply is a function of lake level and lake level is a function of annual rainfall and diversion ability. Possible - Relocating the fishway and diversion facilities would allow the City to deliver its current supply to the City. Current agreement with Casitas generally limits the City’s supply to the demand within the Casitas’ service area.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Casitas</td>
<td>1960-2018</td>
<td>753-11,988</td>
<td>3,305</td>
<td>6,067</td>
<td>15-22%</td>
<td>Lake Casitas does not limit water supplies. Demand varies with precipitation. Increased urban conservation could reduce wastewater flows. Demand varies with precipitation. Higher demand in dry years. Lower demand in wet years. Possible - Possible diversion facilities would allow the City to divert its annual allocation into the City’s distribution system. Previous studies have determined that it is not cost effective to extend purple pipe beyond the existing focus area.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycled Water</td>
<td>1996-2018</td>
<td>430-888</td>
<td>700</td>
<td>700</td>
<td>2-5%</td>
<td>Increased urban conservation could reduce wastewater flows. Demand varies with precipitation. Increased urban conservation could reduce wastewater flows. Demand varies with precipitation. Higher demand in dry years. Lower demand in wet years. Possible - The 2014 Phase 1/2 Amended Final Report Estuary Special Studies included a Recycled Water Market Study that determined it is not cost effective to extend purple pipe beyond the existing focus area. Reclaimed water projects would allow the City to deliver its annual allocation into the City’s distribution system. Current agreement with Casitas generally limits the City’s supply to the demand within the Casitas’ service area.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Water Project</td>
<td>1980-2018</td>
<td>500-20,000</td>
<td>0</td>
<td>10,000</td>
<td>0-25%</td>
<td>Reliability of State Water Projects determines current uncertainties. The status of Water Fix and issues related to the Delta. This project is currently in the environmental review and permitting phase. Most climate change predictions call for reduced snow pack and earlier melt of the snow pack that occurs. This would create early spring flow in areas of available state storage and concurrent agricultural demands. Could result in more frequent Article 21 water, but lower Table A deliveries. Sensitive - Annual allocations are a function of rainfall, snowpack, and reservoir storage. Possible - Completion of the State Water Intervention and blending station projects would allow the City to deliver its annual allocation into the City’s distribution system. Requires construction of a pipeline, blending station, right of way acquisition, and agency agreements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VenturaWaterPure</td>
<td>NA</td>
<td>2,800</td>
<td>4,000-1,400</td>
<td>14-18%</td>
<td>Implemented in part to comply with a consent decree and State law to reduce wastewater discharges to the Santa Clara River Estuary. This project is currently in the environmental review and permitting phase. Potable reuse is considered a drought and climate change resistant supply. Potable water is considered a drought and climate change resistant supply. Possible - Given the VenturaWaterPure project is complete, it would contribute at least 1,800 AFY of water to the City’s water supply. Projected production is estimated to be up to 4,000 AFY by 2030 and potentially up to 5,400 AFY under a 100 percent diversion scenario. Requires construction of an Advanced Water Purification Facility, ocean outfall, and associated infrastructure for aquifer storage and recovery wells.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Supply | 13,562 | 18,902 | 24,000 |
### Table 6-4: Potential Future Water Supply Scenarios

<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>2024 Normal Supply(^1) (AFY)</th>
<th>2024 Multi-year Drought Supply(^2) (AFY)</th>
<th>2024 Emergency Supply Scenario(^3) (AFY)</th>
<th>2025 Normal Supply(^1) (AFY)</th>
<th>2025 Multi-year Drought Supply(^2) (AFY)</th>
<th>2025 Emergency Supply Scenario(^3) (AFY)</th>
<th>2030 Normal Supply(^1) (AFY)</th>
<th>2030 Multi-year Drought Supply(^2) (AFY)</th>
<th>2030 Emergency Supply Scenario(^3) (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitas Municipal Water District</td>
<td>5,872</td>
<td>4,110</td>
<td>0</td>
<td>5,904</td>
<td>4,133</td>
<td>0</td>
<td>6,067</td>
<td>4247</td>
<td>0</td>
</tr>
<tr>
<td>Ventura River / Foster Park</td>
<td>4,200</td>
<td>2,323</td>
<td>2,323</td>
<td>3647 - 6700</td>
<td>2,323</td>
<td>2,323</td>
<td>3647 - 6700</td>
<td>2,323</td>
<td>2,323</td>
</tr>
<tr>
<td>Mound Groundwater Basin</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Oxnard Plain Groundwater Basin</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
<td>3,862</td>
</tr>
<tr>
<td>Santa Paula Groundwater Basin</td>
<td>3,000</td>
<td>1,141</td>
<td>1,141</td>
<td>3,000</td>
<td>1,141</td>
<td>1,141</td>
<td>3,000</td>
<td>1,141</td>
<td>1,141</td>
</tr>
<tr>
<td>Original City Allocation</td>
<td>41</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
<td>40.9</td>
</tr>
<tr>
<td>City Acquired Water Rights</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>865</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Recycled Water</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Direct Potable Reuse</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>2800</td>
<td>2800</td>
<td>2800</td>
<td>2800-4000</td>
<td>2800-4000</td>
<td>2800-4000</td>
</tr>
</tbody>
</table>

**Total**

|                | 21,675                         | 16,177                         | 12,067                        | 23,954-27,007   | 19,000          | 14,867          | 24,282-28,535   | 19,114-20,314   | 14,867-16,067   |

**Projected Demand**

|                | 17,475                         | 17,475                         | 17,475                        | 17,571          | 17,571          | 17,571          | 18,055          | 18,055          | 18,055          |

1. **Normal** = No stages of the City’s Water Shortage Event Contingency Plan are in effect; City facilities are fully functioning and not restricted for operational reasons.
2. **Multi-year Drought Supply** = Multiple years of below average rainfall. Casitas = Stage 3; Ventura River = Average of 2014-2018 Production; Santa Paula Basin is at Stage 2.
3. **Emergency Supply Scenario** = Multi-year drought assumptions plus no supply from Casitas.
4. **State Water** = Difference between projected demand and total supply from other sources.
Figure 6-2: Potential Future Water Supply Scenarios

- Lake Casitas
- Ventura River / Foster Park
- VenturaWaterPure
- Recycled Water
- Groundwater Wells
- State Water
- Projected Demand

Acre Feet (AF)

- 2024
- 2025
- 2030