

# 2021 Water Efficiency Plan



Prepared by:



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## List of Abbreviations and Acronyms

The following abbreviations and acronyms are used in this report.

AB	California Assembly Bill
AF	acre-feet
AFY	acre-feet per year
AMI	Advance Metering Infrastructure
AWPF	Advanced Water Purification Facility
BMP	Best Management Practices
Casitas	Casitas Municipal Water District
CII	Commercial, Industrial, Institutional
CIP	Capital Improvement Program/Plan
CWRR	Comprehensive Water Resources Report
DMM	Demand Management Measures
DWR	Department of Water Resources
ETo	evapotranspiration
EPA	Environmental Protection Agency
FTE	full time equivalent
gpcd	gallons per capita per day
HCF	hundred cubic feet
mg/L	milligrams per liter
mg	million gallons
MGD	million gallons per day
SB	California Senate Bill
SCRE	Santa Clara River Estuary
SWP	State Water Project
UWMP	Urban Water Management Plan
VWRF	Ventura Water Reclamation Facility
WBIC	Weather Based Irrigation Controllers
WEP	Water Efficiency Plan
WSECP	Water Shortage Event Contingency Plan
WSS	WaterSense Specification

# 1 Introduction and Purpose

Ventura Water relies on a diverse portfolio of local water supplies and incorporates strategic planning to meet the long-term needs and demands on the water system. Water efficiency is an important element in the City of Ventura's long-term water supply strategy.

For over 30 years, Ventura has steadily decreased water consumption levels and has met state water reduction standards. Ventura Water has implemented an award-winning water efficiency program that has transformed water conservation into a Ventura way of life. The City has adopted conservation measures and rates to limit the impact of droughts and avoid water shortages. Public messaging reaches all audiences to help Ventura Water exceed reduction targets. Going forward, Ventura Water wants to focus on maintaining reductions, increase collective water stewardship through greater conservation efforts and new technology, implement operational practices to increase efficiency, and look at the future reliability of water supply.

Through this update to the Water Efficiency Plan (WEP), Ventura Water is providing a description of current conservation efforts and establishing a path to achieve greater water use efficiency. With the uncertainty of climate impacts on water resources in the future, the WEP outlines specific measures Ventura will use to achieve efficiency and ensure the reliability of Ventura's water supply.

## 1.1 Plan Development

To create the Water Efficiency Plan, Ventura Water met with staff including water, wastewater, stormwater, and parks professionals to brainstorm various potential water efficiency programs for the City of Ventura. As a first step, a matrix was developed to identify the various programs currently implemented and those that could be implemented over the next five years. Programs included in the plan incorporate recycled water, public outreach, stormwater, greywater, and assistance to residential, commercial, industrial, and institutional customers. This plan is a "living document" where new programs can be added to address public and staff recommendations. The 2021 WEP builds upon the goals and objectives established by the task force.

### 1.1.1 Policies for Water Efficiency Actions

It is the policy of the City of Ventura and Ventura Water to promote water efficiency. Ventura's water supply is a limited resource, and everyone shares in the responsibility for appropriately using and preserving this resource. All customers of the Ventura Water System are therefore encouraged to voluntarily reduce water usage by implementing daily water conservation, regardless of whether voluntary or mandatory water restrictions are implemented, or certain water shortage surcharge rates are applied. There are many simple, cost-effective ways to lower water use and reduce strain on water resources and infrastructure without comprising Ventura's quality of life. Ventura Water customers are required to follow water waste prohibitions outlined at:

<https://www.cityofventura.ca.gov/893/Water-Shortage-Update>

### 1.1.2 Needs for Water Efficiency Actions

Ventura Water’s Comprehensive Water Resources Report (CWRR) is prepared annually to provide updates on the City’s projected water supply and demand while considering challenges, uncertainties, and reliability associated with Ventura’s water sources. The CWRR is used along with the City’s Water Shortage Event Contingency Plan (WSECP) to evaluate the current water shortage stage and helps guide the implementation practices identified in the WEP to meet water demand. In 2015, the City declared a Stage 3 water shortage emergency calling for 20% mandatory conservation. From 2015 to 2019, the City remained in a Stage 3 water shortage event. Ventura residents did an outstanding job meeting the conservation goal in the Stage 3 water shortage. Over the last five years, Ventura residents exceeded the goal with a 23% average reduction. The results demonstrate that Ventura Water’s water efficiency programs and outreach have worked. The 2020 CWRR indicated that the spread between the current water demand and water supply is tight. Water conservation remains a top priority for the City to ensure that local water supplies remain resilient through drought periods, emergencies, potential water supply project delays, and regulatory, operational, and legal constraints.

### 1.1.3 Drivers for Water Efficiency Actions

#### 1.1.3.1 Meeting Existing and Future Water Needs of City Residents and Businesses

Ventura Water is committed to meeting existing and future water needs of city residents and businesses. As identified in the CWRR, continued conservation efforts are needed for the supply to meet demand in the short-term. Residential customers comprise most of the City’s water demand as identified in Table 1, therefore, past conservation efforts have focused on residential customers. Ventura Water’s successful 23% water use reduction demonstrates that residential customers are implementing behavior changes and can make a significant impact on water demand.

**Table 1  
Ventura Water Demand by Account Type**

Account Type	Demand
Residential	65%
Commercial	23%
Irrigation	6.5%
Industrial	3%
Institutional	3%

#### 1.1.3.2 Meeting Regulatory Requirements

The State of California has adopted legislation requiring water conservation as a result of extended periods of drought and water system supply shortages. The City of Ventura is on track to meet pending regulatory requirements as follows:

### 1.1.3.2.1 Making Water Conservation a California Way of Life

In 2018, the State of California adopted legislation for water conservation and drought planning through Senate Bill (SB) 606 and Assembly Bill (AB) 1668. The legislation requires urban water suppliers to compare water use to the new standards beginning November 2023.

- Residential Indoor Water Use Standard
  - 55 gallons per person per day until January 2025
  - 52.5 gallons per person per day from January 2025 through December 2029
  - 50 gallons per person per day beginning in January 2030
- An outdoor standard set as a fraction of reference evapotranspiration
- Commercial, Industrial, and Institutional (CII) Performance Standards

Starting in 2027, local water suppliers who fail to comply with the adopted long-term standards could be fined \$1,000 per day during non-drought years and \$10,000 per day during declared drought emergencies and certain drought years.

Ventura Water is on track to meet these regulatory requirements. The City's CWRR estimates that the City's current indoor water use is less than 50 gallons per capita per day (gpcd), meeting both the indoor water use standard of 55 gpcd and the 50 gpcd standard that will go into effect in 2030.

Ventura Water will need to comply with a combined residential indoor standard and outdoor standard; because current indoor water use is low it appears that the City is on track to meet the anticipated standard. Although final guidance has not been issued, the City anticipates that current practices will also meet the CII Performance Standards.

### Making Water Conservation a California Way of Life - Water Loss Standard

In addition to the standards described above, the State of California is in the process of drafting water loss standards. Compliance includes responses on:

- Water loss data quality in 2022
- Feasibility of pressure management
- Systematic asset management in 2024

Suppliers will be required to comply with individual volumetric standards based on an economic model for leak detection and repair costs. It is anticipated that "low real loss" will be defined as 10 gallons per connection per day for suppliers reporting in gallons per connection per day.

Beginning in 2028, suppliers will need to comply with volumetric standards on a three-year average basis with an allowed variation of 5 gallons per connection per day over three years.

While the City meets the current reporting standard for water loss, the City will continue to implement operational programs to meet the real loss per connection standard which will go into effect in 2028. Ventura Water will focus future water conservation efforts on reducing distribution water system losses.

#### 1.1.3.2.2 Delta Plan/Delta Reform Act

The Delta Plan/Delta Reform Act requires that suppliers anticipating participating in or receiving water from a proposed project (i.e., an action to be covered in the Delta Plan and its associated permits) must demonstrate consistency with the Delta Plan's policy to reduce reliance on the Sacramento-San Joaquin Delta. The act requires these suppliers to demonstrate consistency with the Delta Plan's policy to reduce reliance on Delta water supplies. Delta Plan Policy WR P1 Section (c) of WR P1 states that commencing in 2015, suppliers that have (a) completed an UWMP, (b) implemented the efficiency measures in the plan, and (c) shown a measurable reduction in Delta reliance and improvement in regional self-reliance in the plan, are contributing to reduced reliance on the Delta.

The City has a contract for up to 10,000 AFY of State Water Project (SWP) water with DWR. Currently SWP water is limited by the ability to deliver the water to the City. To date, the City has not received delivery of its annual SWP allocation. The Monterey Amendment Settlement Agreement to the SWP contracts in 1999 provided the City a formal mechanism to allow it to place its annual SWP water allocation into a "turn back" pool to be purchased by other SWP contractors. The City has taken part in the "turn back" pool over the past several years, which has provided a small annual revenue offset. The City also has the ability to supplement SWP water with transfers from San Geronimo Pass Water Agency (SGPWA). In 2018 and 2019, the City executed agreements with SGPWA to exchange its State Water Project Allocation. As a result of these agreements, SGPWA is contractually obligated to return 2,075 AF of water to the City by 2029.

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 August 2019, the Ventura City Council voted to certify the State Water Interconnection Project Final Environmental Impact Report. 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 Final 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.



### 1.1.3.3 Reducing Reliance on the Delta

Concurrent with plans to pursue delivery of SWP water, Ventura Water will reduce reliance on the Delta and maximize local water supplies by continuing to reduce demand and by constructing a new advanced water treatment facility for potable reuse.

### 1.1.3.4 Reducing Wastewater Utility Demand

Curtailments in customer water use reduces demand on the wastewater utility (also Ventura Water) by reducing wastewater flows. Reduction measures help postpone the need to develop additional treatment capacity.

### 1.1.3.5 Address Short-Term Emergencies

Water demand reductions from water conservation actions help Ventura Water respond to short-term emergencies. In the event of a natural disaster or other disruption to the water supply delivery, water conservation actions can help the City continue to meet water needs of residents.

### 1.1.3.6 Improve Sustainability of Water Resources

Ventura Water has a diverse portfolio of local water supplies, including water from Lake Casitas, the Ventura River, and groundwater basins. Ventura's conservation efforts help to improve the sustainability of these local water resources.

## 1.2 Lessons Learned from Past Water Efficiency Actions

### 1.2.1 Past Successes

The water efficiency program has resulted in an estimated water savings of over 725 AFY. Following a drought in 2014, the City launched customer-focused programs that received a great deal of participation. Many of the water conservation programs were partially funded by grants from Proposition 84, the Safe Drinking Water, Water Quality, and Supply, Flood Control, River and Coastal Protection Bond Act of 2006.

Ventura Water's residential and commercial water surveys resulted in the most water savings. A dedicated Water Conservation Specialist conducts a water survey by visiting the customer's home or business and provides education to customers on how to read their water meter and understand their water bill. The Water Conservation Specialist evaluates the customer's indoor and outdoor water usage and appliances and identifies leaks. Customers receive free water conservation devices and water savings recommendations based on the results of their individual survey. Through the water surveys, customers can better understand their water use and increase their water use efficiency. With the implementation of Advanced Metering Infrastructure (AMI) technology, leaks can be more readily detected and repaired.

The majority of customer water conservation programs are focused on outdoor water conservation. In 2015, the City launched the turf removal program which received a significant amount of participation in 2015-2016. Since then, participation has plateaued.

The City's new Drip Irrigation Retrofit program allows City residents to have their irrigation system retrofitted with high efficiency sprinkler nozzles, converted to a water efficient drip irrigation system, and updated to a wi-fi enabled smart irrigation controller, free of cost. The irrigation retrofit is performed by a City contractor. Being a relatively new program, Ventura Water will assess the success of this program when normal operations (operations post-COVID19 stay at home orders) resume.

Ventura Water offers indoor water conservation rebates and incentives. Customers can apply for a hot water recirculating pump that connects to the water heater, providing instant hot water to the home's fixtures and reducing the amount of water wasted while waiting for the water to get warm. Additionally, Ventura Water offers rebates on high efficiency washing machines and toilets. Many of these programs have been successful, especially during stay-at-home orders due to COVID-19. However, indoor water savings are more difficult to quantify and are considered significantly lower than outdoor water efficiency actions.

### **1.2.2 Customer Interest**

Many of Ventura's conservation programs have received considerable interest and participation from the public. Following the drought years, beginning in 2015, Ventura Water implemented many new educational and outreach programs, including the monthly Water-Wise Gardening workshops to help promote drought tolerant landscaping, efficient water use, and healthy gardening practices. The workshops and educational materials were well received by many. Participation at water awareness events was a key strategy to get educational and outreach material and inform residents of our programs.

The majority of interest in water conservation programs has focused on indoor and outdoor residential rebates and giveaways, as described in Section 1.2.1. Although several conservation programs have been affected by COVID-19, customers continue to express interest in reducing their water use. Ventura Water staff are working diligently to continue programs and develop new strategies for water efficiency.

Many customers have shared the desire for Ventura Staff to provide rebates for multi-family residential and commercial accounts which will be a consideration going forward. There has also been interest in installing submetering for mobile home parks.

### **1.2.3 Operational Challenges and Opportunities**

Although Ventura's water efficiency programs have proven successful in achieving intended water savings, operational challenges exist with several of the programs. The turf removal program had a great amount of interest and participation following the drought; however, participation has steadily declined over the years. Interested customers have indicated that landscape design is a hurdle for residents to complete turf removal. An opportunity for Ventura Water to help increase turf removal is to offer design support.

## **1.2.4 Review of Local Agency Programs**

Ventura Water reviews local agency water conservation programs for partnership opportunities. In 2016, the County of Ventura confirmed acceptance of the Proposition 84 Integrated Regional Water Management (IRWM) grant from the Department of Water Resources for use on a variety of projects in Ventura County. Of this amount, approximately \$1.8 million was available for regional water conservation programs. The City of Ventura partnered with Casitas Municipal Water District and the City of Santa Paula to administer a regional turf replacement program.

This WEP was developed after a review of local agency programs for potential partnerships. No cost-effective partnerships were identified for inclusion; however, Ventura Water will continue to consider these opportunities as they arise.

## **1.2.5 Benefits and Costs of Conservation Efforts**

### **1.2.5.1 Benefits**

Ventura's past conservation efforts have resulted in a significant decrease in water consumption. Over the last 20 years, Ventura Water customers have reduced gpcd consumption by 40%. In the year 2000, customers averaged 187 gpcd; in 2019 customers averaged 111 gpcd. New programs developed since 2016 have resulted in significant water savings for the water system. These programs have resulted in a savings of over 236 million gallons and a reduction of 5 gpcd.

### **1.2.5.2 Cost-Benefit Analysis**

Ventura Water performed a cost-benefit analysis of the current conservation measures, as shown in Table 2. The analysis demonstrated that there is a wide discrepancy between different measures and their costs per AF of savings, which range from \$40 per AF to \$6,240 per AF. The most cost-effective conservation measures include implementing conservation pricing, partnering with energy utilities, leak alerts for CII customers, water neutrality ordinances and landscape irrigation codes. In Table 2 the grey shading denotes past and present conservation actions by Ventura Water. As seen in Table 2, Ventura Water has undertaken many of the most cost-effective measures such as pricing, water neutrality ordinance, water conserving landscape and irrigation codes, and controlling water loss. However, there are still opportunities for cost-effective conservation, including continuation of existing programs (i.e., pricing) and new programs (CII Leak Alert).

**Table 2  
Conservation Measures Cost-Benefit Analysis**

Measure	Costs per AF Savings (\$)
Pricing	40
Partnership with Energy Utilities	50
CII Leak Alert	50
Water Neutrality Ordinance	50
Water Conserving Landscape and Irrigation Codes	120
Controlling Water Loss	160
Require Irrigation Designer/Installers to be Certified	180
Financial Incentives for CII Landscape Upgrades	190
High-Efficiency Sprinkler Nozzles	200
CII Rebates to Replace Inefficient Equipment	200
Require Weather Adjusting Controllers	210
Clothes Washer Rebates	260
Large Landscape Outdoor Water Efficiency Evaluation	410
Require Plan Review for CII	470
Residential High Efficiency Toilet Rebate	490
District System Optimization Review	510
Leak and Plumbing Assistance for Low Income	610
CII Faucet and Showerhead Giveaways	650
AMI	700
Prohibit Water Waste with Enforcement	750
Weather Based Irrigation Controllers	760
Hot Water Recirculating Pump Rebate	810
Public and School Education	850
Cooling Tower Regulations	860
Replace CII Inefficient Equipment	930
Financial Incentives for Residential Irrigation Upgrades	1020
Residential Faucet and Showerhead Giveaways	1167
Residential Toilet Replacement Program	1222
Single-Family Turf Removal	3105
Residential Indoor and Outdoor Surveys	1618
CII Efficient Toilet Replacement	2125
CII Indoor Water Efficiency Evaluation	2640
CII and MF Turf Removal	1305
Pool Cover Rebates	6240
CII Urinal Rebates	6192
Rain Barrel Rebates	*
Mobile Reuse	*

\*No cost savings quantified for these programs.

### 1.3 Goals

The intent of this Water Efficiency Plan is for Ventura Water to take the lessons learned from past water conservation efforts, an understanding of actions needed to comply with upcoming regulations (e.g., pending water loss standards), to implement municipal water efficiency programs to achieve water savings in anticipation of water shortage events identified in the Water Shortage Event Contingency Plan and to establish long-term water resilience. Ventura Water's long-term water efficiency goals include:

- Improve Water Loss Control

In anticipation of the State's Water Loss Standard, Ventura Water will focus on water loss control. This will improve both long-term water efficiency and reduce demand in a shortage. System auditing, loss tracking, infrastructure maintenance, leak detection and repair for water systems can be improved by the consistent application of best practices. Additionally, to meet compliance with the new state water loss standards, Ventura Water will need to consider new programs to reduce water loss.

- Water Efficiency Education and Information Campaign

Studies show that public outreach alone has a measurable effect on water use. Public outreach will be essential to maintaining water efficiency and gives Ventura Water an avenue to reach out to customers when extra-ordinary conservation is needed (e.g., declared shortage). Ventura Water will continue engaging water customers and youth through public outreach education campaigns, school facility tours and class presentations, and targeted outreach.

- Reduce Outdoor Water Use

Review of customer water use estimates indicate that residents already have relatively low indoor water use. Therefore, opportunities for decreasing water use must focus on outdoor water demand. Reducing outdoor water use for residential and commercial customers is a primary goal of Ventura Water. The majority of residential customer water use is from outdoor use and landscaping. Through Water-Wise garden workshops, giveaways, and outdoor equipment rebates, and new programs, a significant amount of water savings can be achieved.

- Improve Water Resources Management

Ventura Water can help create long-lasting benefits to water supply conditions through efficiency and improved water resource management, including the use of recycled water for potable water drinking water supply through VenturaWaterPure and sustainable use of local water resources.

## **1.4 Relationship to Other Planning Efforts**

### **1.4.1 Urban Water Management Plans**

The 2020 Urban Water Management Plan (UWMP) provides the framework to help guide Ventura's water supply management and conservation actions for the future. As part of the UWMP update, Ventura Water looks at single and multiple dry year impacts to future water supply. When water supply shortages are identified, the WEP provides a road map to buffer the City from these potential impacts and improve water conservation actions.

### **1.4.2 Water Shortage Event Contingency Plan**

The WEP describes opportunities to implement water savings. The Water Shortage Event Contingency Plan (WSECP) describes specific actions to respond to water shortage events, based on the evaluation of water supply and demand as identified in the UWMP. The WEP provides a long-term plan of action, in effect with or without drought or shortage. In shortages, the WSECP proscribes actions that will require customer behavior changes (e.g., curtailed outdoor water use, no use of water for decorative water features). Programs implemented under the WEP will reduce the likelihood of shortage and reduce the inconvenience and cost to customers when it is necessary to implement the WSECP.

### **1.4.3 Capital Improvement Plan**

The City's Capital Improvement Plan is a planning document that identifies the City's infrastructure needs over the next six years. The Plan includes maintenance and replacement projects as well as enhancements that improve the quality of life in Ventura. To meet water conservation goals identified in the WEP, infrastructure repair and replacement is needed. The CIP prioritizes projects for funding so that there is a mechanism to achieve the City's goals.

## **2 Identified Water Efficiency Actions**

### **2.1 Operational Best Management Practices**

Operational Best Management Practices support the following Water Use Efficiency Goals:

- Improve Water Loss Control
- Water Efficiency Education and Information Campaign
- Reduce Outdoor Water Use
- Improve Resource Management

In addition, it is important for Ventura Water to optimize operational practices to demonstrate a commitment to water efficiency to water customers. This section outlines several key actions that Ventura Water has taken and will continue to incorporate water efficiency as part of operational practices. Water efficiency is an integral part of Ventura Water's operational ethic and responsibility.

#### **2.1.1 Water Conservation Staff**

Ventura Water has employed water conservation staff since 1989. Currently, Ventura Water employs two full-time equivalent (FTE) positions dedicated to water conservation. The Management Analyst position oversees the water efficiency program which includes all public education and outreach programs, water conservation campaigns, school education, facility tours, and associated grant funding. The Environmental Services Specialist position implements water efficiency programs and activities, including residential water surveys and associated residential and commercial outreach and rebate programs.

Employing staff dedicated to water efficiency activities has allowed Ventura Water to dedicate time and resources to create a highly successful water conservation program. Staff plan, implement, and manage programs and regularly apply for grant funding to continue operating the programs.

#### **2.1.2 Water Waste Prevention**

In 1989, the City adopted Ordinance 89-6 prohibiting activities and authorizing penalties to be imposed for violations. The ordinance prohibits watering landscape in a manner which allows water to run to waste, non-recirculating fountains, customer plumbing leaks, hosing of hard surfaces, and serving of water by a restaurant to its customers without first being requested by the customer. (San Buenaventura Municipal Code Chapter 22.170). In addition, the City's WSECP identifies levels of shortage, prohibitions, and associated consumption reduction, penalties, and charges. (San Buenaventura Municipal Code Chapter 22.171).

Ventura Water staff continues to be diligent in monitoring and responding to water waste incidents. Residents are encouraged to anonymously report water waste through a

website form or by calling Ventura Water Customer Care. City staff investigates an average of 10 water waste incidents per month.

Additionally, the City of Ventura adopted the Water Rights Dedication and Water Resource Net Zero Policy, Ordinance No. 2016-004 (“Ordinance”), in August 2016. The intent of the Ordinance is to provide a framework to address water supply for future development within our community. A detailed analysis of the City’s water supply and demand concluded that the City’s water supplies are currently being used at or near full capacity.

To ensure that new development does not adversely affect the water supply or water supply reliability of the City’s existing customers and/or approved new development, the Ordinance requires subject projects to offset new or increased water demand through one or more compliance options, including dedication of water rights, extraordinary conservation measures, and/or payment of a fee.

The fee proceeds are used to acquire additional water rights or develop water resources for new potable supplies for use by the City (San Buenaventura Municipal Code Chapter 22.180).

### **2.1.3 Landscape Ordinance**

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires cities to adopt a landscape conservation ordinance by January 1, 2010. Pursuant to the law, the State Department of Water Resources prepared a Model Water Efficient Landscape Ordinance (Model Ordinance) for use by local agencies. The City of Ventura adopted a city-specific landscape ordinance in 2011, with public input via stakeholder workshops.

The Ordinance requires that landscape account applicants submit a full landscape documentation packet that is consistent with water efficiency practices. The Building & Safety Department established a tracking system for all projects adhering to the landscape ordinance. The tracking system notifies staff when a development project submittal is ready for landscape water efficiency review or landscape field inspection. Staff review and inspect landscape for compliance with the Landscape Ordinance and record their findings in the tracking system. This automated system helps ensure that new developments are consistent with best management practices for outdoor water use.

### **2.1.4 Metering**

All of the City’s retail customers are metered and billed with commodity rates for both water and sewer service. The City does not have any unmetered services and all new connections are metered and billed volumetrically. Water Enterprise Funds are completely funded through monies generated through customer rates based on their usage, which must be set appropriately to self-sustain operations, maintenance, and capital renewal programs. Water accounts are currently billed bi-monthly and will be billed monthly beginning July 1, 2021. Residential accounts have a tiered water rate structure, non-residential water accounts are billed with uniform rates, and reclaimed water is



charged a reduced, uniform rate. Metering sends an appropriate price signal to customers.

Ventura Water is committed to upgrading infrastructure to achieve water efficiency. In 2016, the City Council adopted the Meter Upgrade Project to replace all manually read water meters with AMI or smart meters that automatically relay water usage to the City's billing system through a secured network. The project launched in October 2018 with plans to replace all 32,000 Ventura Water meters by October 2021. To date, the project is 80 percent complete with over 25,000 smart meters installed. In April 2020, Ventura Water launched HomeConnect, now known as WebConnect, a new online portal that allows Ventura Water customers to track their hourly water usage, set water-use budgets, and receive leak detection notifications.

The upgraded smart meters help improve water use management for Ventura Water staff. With access to real-time customer usage, Ventura Water staff can monitor consumption behavior, demand management, and phase load balancing. The knowledge of customer usage improves Ventura Water staff's ability to work with customers to better understand their bill. This allows Ventura to manage utility costs more effectively and improve customer service. Customers can receive automatic leak detection alerts and Ventura Water staff can more quickly and efficiently identify leaks, resulting in less overall water system losses. AMI data can also be used effectively to reduce water theft by detecting unauthorized water use. Upon completion of the project in 2021, the Meter Upgrade Project is projected to save more than 600 acre-feet of water per year.

In addition, metering and monitoring of water use data allows Ventura Water to identify where meter replacement and line replacement is necessary to reduce water loss.

#### **2.1.4.1 Customer Service**

AMI provides Ventura Water the opportunity to increase customer satisfaction and consumer confidence by providing a greater level of detail on the customer's water usage. With more data available to customers on their usage, the customer confidence in the billing process increases. Additionally, with this information, customers can easily track and adjust their usage which can result in lower water bills. Leak detection alerts also help customers identify leaks quickly and get them resolved, resulting in less water loss and lower water bills.

Ventura Water also has a Customer Care division dedicated to providing customer service for Ventura Water customers. Staff are available to answer questions and respond to customer concerns during business hours. Phone lines are also available for customers to report leaks, main breaks, or other water emergencies.

#### **2.1.5 Volumetric Pricing**

Every five years, a Cost of Service and Rate Design Study is conducted for the water and wastewater enterprises to ensure fair and equitable rates for all City users and to generate sufficient revenue to meet operating and capital costs. A new rate structure and rates were implemented in Fiscal Year 2012-2013, followed by modified rates in Fiscal Year

2014-2015, and again in September of Fiscal Year 2015-2016 in response to the Stage 3 Water Shortage Event, which modified the rate structure and rates in response to the drought. These rates were established to achieve full revenue recovery during drought and non-drought years. Currently the City is conducting a Water and Wastewater Rate Design Study. If adopted by City Council, new rates will be implemented in July 2021.

### **2.1.6 Fire Training and Emergencies**

The City of Ventura's Fire Department utilizes best management practices for water use during training activities and when responding to fire emergencies. Since 2011, the Fire Department has estimated fire emergency water use in waterlogs that are reported daily to the Battalion Chief. Fire training activities completed at the Alessandro Training Facility are fully metered. During new construction activities, fire hydrant use is metered.

### **2.1.7 Professional Development and Certifications**

Ventura strives to collaborate with and encourage employee and contractor participation in professional development workshops, certification, and continuing education programs. The City intends to have well-trained staff and relationships with qualified professionals in the local community that Ventura can refer customers to and help stimulate the local economy.

Several of Ventura Parks staff are certified Maxicom Technicians. The Maxicom hardware training is designed to introduce and instruct the technician(s) responsible for the maintenance, upkeep, troubleshooting and repair of the Maxicom Central Control irrigation that staff installed at many of the City's parks. The Maxicom system allows parks personnel to track park water use, of which most use potable water. The program alerts parks staff if there is heavy water use or a main break and automatically shuts the system off.

### **2.1.8 Backflow Testing**

The installation of required backflow assemblies is necessary to protect the water system from possible contamination. The City manages cross-connection control across residential, commercial, and institutional accounts. Staff inspects fire lines that have a backflow device annually and monitors over 300 backflow testing sites. These measures help prevent backflow water waste incidents from occurring. The backflow testing and inspection has the added benefit of identifying leaks thereby reducing water loss.

### **2.1.9 Best Management Practices for Parks Department**

The Ventura Parks and Recreation Department incorporate water efficient best management practices into daily operations, including:

- Use of Maxicom system at 14 parks and other irrigated sites that have automatic water shut off devices
- All parks that do not use the Maxicom system have weather sensing devices that alert Parks Staff to skip watering after rainfall

## 2.1.10 Water Loss Control

In addition to water conservation programs, the City increases water use efficiency on the operational side of the utility to reduce losses. 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, resulting in no additional potable water use. The NO-DES truck is an innovative water saving tool for the community. In addition to the NO-DES truck, the City's A.M.I. infrastructure discussed in Section 2.1.4 and the City's Capital Improvement Plan, which includes replacement of aging pipelines, help the City reduce water loss. These programs help ensure that water pumped through the distribution system reaches customers and that the City can account for what is lost along the way.

### 2.1.10.1 Water Audits

In compliance with SB 555 and AB 1414, Ventura Water conducts annual water loss audits and reports real and apparent losses to DWR each year. The City uses the AWWA free water audit software, which is a tool designed to help quantify and track water losses associated with water distribution systems and identify areas for improved efficiency and cost recovery. Completing a water audit is considered a best management practice for controlling water losses. Ventura Water conducts the audit annually and a third-party technical expert validates the data. Over the past three years, Ventura Water has experienced a 7.07% system-wide average annual water loss over the past three years (2017 – 2019). While the City meets the current reporting standard for water loss, the City will continue to implement new operational programs to meet the real loss per connection standard which will go into effect in 2028.

### 2.1.10.2 Leak Detection

The City identifies unreported leaks through a leak detection program. A visible water main break typically has very short run times, but because of the disruptive nature of such events, prompts an almost instantaneous response time, with a repair time of several hours. Reported main breaks estimated water loss is significantly less than an unreported hidden leak. Operations staff use pressure monitoring stations to identify and respond rapidly to leaks.

Unreported leaks, which are small and have a long duration, typically go unnoticed by customers, and are usually only identified through an active leak detection program. A leak detection survey is the most common means to identify unreported leaks. Ventura Water staff have conducted over 480 residential water surveys and identified leaks during home visits.

New AMI technology has helped Ventura Water customers identify leaks on the customer side. Ventura has an opportunity to use AMI in the future for acoustic leak detection in the City's water distribution system.

### 2.1.10.3 Infrastructure

The City guards against water loss by maintaining and replacing meters and pipelines regularly as part of the Capital Improvement Program. Aging and leaking pipes are prioritized for funding. Additionally, field crews often perform meter calibrations for high accuracy and replace meters for large users. The City also has the opportunity to add metering at the water treatment plants.

## 2.2 Residential Customers Water Efficiency Programs

As described earlier, residential customers make up the bulk of demand in the Ventura Water system and therefore are a logical focus for water use efficiency programs. Demonstrating water efficiency is important to all of us. Our water customers continue to be effective in reducing Ventura’s overall water demand. Customers use less water today than in 1970, even though population has increased by 80%. Even in non-drought years, water conservation is a way of life in the City of Ventura. Given the low indoor water use, Ventura Water will continue to focus on outdoor conservation programs in the future.

### 2.2.1 Enforce Green Building Code

The City requires homeowners making additions or retrofitting plumbing fixtures to comply with State Green Building Code, Energy Code and Plumbing Code standards for water efficient fixtures. Integration of WaterSense Specifications (WSS) fixtures for new development have been accelerated by the 2010 California Green Building Standards Code (CAL Green Code), which became effective in January 2011. The Code sets mandatory green building measures, including a 20 percent reduction in indoor water use, as well as dedicated meter requirements and regulations addressing landscape irrigation and design. Local jurisdictions, at a minimum, must adopt the mandatory measures; the Code also identifies voluntary measures that set a higher standard of efficiency for possible adoption. Ventura Building and Safety Department currently evaluates plans and permits to comply with the CA Green Building Code. The mandatory requirements encourage sustainable construction practices in water efficiency and conservation.

### 2.2.2 Residential Water Surveys

Since 2014, Ventura Water has offered customers a free water conservation survey, where a full-time Environmental Services Specialist evaluates indoor and outdoor water usage in customers’ homes. The Specialist also observes if there are any leaks present. Depending on the results of the survey, the City provides low flow showerheads, aerators, and information regarding water saving practices. This program has been one of the most successful practices for achieving water savings with residential customers. Since 2016, 484 Water Conservation surveys have been completed.

Year	Water Efficiency Surveys
2016	72
2017	81
2018	116
2019	94
2020	121
Total	484

### 2.2.3 Indoor Water Efficiency, Devices, and Appliances

Ventura Water has several rebate programs in place to maintain and further reduce indoor water consumption.

#### 2.2.3.1 High Efficiency Toilet Rebates

In September 2019, Ventura Water began offering \$100 rebates to customers who purchase and install a high efficiency toilet with a gallons per flush of 1.1 or less (maximum of two rebates per customer). To date, 76 rebates have been issued. This program continues to be offered to Ventura Water customers.

Year	HE Toilets
2016	-
2017	-
2018	-
2019	25
2020	51
Total	76

#### 2.2.3.2 High Efficiency Washing Machine Rebates

Ventura Water offers \$150 rebates to customer who purchase and install a high efficiency washing machine with a water factor of 3.8 or less (maximum of one rebate per customer). To date, 276 rebates have been issued. This program continues to be offered to Ventura Water customers.

Year	HE Is washing Machines
2016	29
2017	56
2018	14
2019	53
2020	124
Total	276

#### 2.2.3.3 Instant Hot Water Recirculating Pump Program

In August 2019, Ventura Water launched the Instant Hot Water Recirculating Pump Project. The program offers Ventura Water customers a free recirculating hot water pump that provides instant hot water to indoor plumbing fixtures. Pumps are estimated to save up to 15,000 gallons of water a year per residential household. To date, 524 pumps have been distributed for estimate water savings of 24 AFY. This program continues to be offered to Ventura Water customers.

Year	Instant Hot Water Recirculating Pumps
2016	-
2017	-
2018	-
2019	227
2020	297
Total	524

## 2.2.4 Outdoor Water Efficiency, Devices, and Appliances

### 2.2.4.1 Irrigation Retrofit Program

Landscape irrigation is a large portion of Ventura Water residential potable water consumption. Ventura Water offers rebates and giveaways to promote water outdoor use efficiency for residential water customers.

### 2.2.4.2 High Efficiency Sprinkler Nozzles

Beginning in 2016, Ventura Water has offered free high efficiency sprinkler nozzles to residential and commercial customers, including direct installation by a Certified Landscape Irrigation Auditor. To date, approximately 10,990 sprinkler nozzles have been installed for an estimated water savings of 60 AFY. This program continues to be offered to Ventura Water customers.

Year	HE Sprinkler Nozzles
2016	873
2017	1,629
2018	4,465
2019	2,578
2020	1,445
Total	10,990

### 2.2.4.3 Smart Irrigation Controllers

In June 2016, Ventura Water launched a Smart Irrigation Controller Program. Qualifying customers receive a free weather-based irrigation controller (WBIC), professional installation, and on-site training. To date, 609 controllers have been installed for an estimated savings of 25 AFY. This program continues to be offered to Ventura Water customers.

Year	Residential Controller
------	------------------------

2016	14
2017	134
2018	140
2019	113
2020	208
Total	609

#### 2.2.4.4 WaterWise Turf Replacement Program

Since 2015, the City has offered \$2 per square foot rebates to qualifying customers that replace their lawn with a water wise landscape. Applicants are required to submit before photos, a simple site plan showing the design of the new landscape, and a complete plant list. Participants are required to create a landscape that includes reasonable ground cover, plants, and permeable surfaces. Synthetic or artificial turf is not eligible for the program. After receiving approval and a notice to proceed, participants have 120 days to complete the project and provide final project photos and receipts. Residential customers can receive a maximum rebate of \$3,200.

Since 2016, more than 530,000 square feet of turf has been removed, resulting in a projected water savings of 21 AFY. This program continues to be offered to Ventura Water customers.

Year	Sq Ft of Turf Removed
2016	145,114
2017	161,128
2018	61,888
2019	62,052
2020	99,818
Total	530,000

### 2.3 Commercial, Industrial, and Institutional Customers

The City has approximately 2,700 CII accounts, which constitutes about 27 percent of total water deliveries. Ventura Water plans to consider the feasibility of a sustained reduction program for commercial businesses and will monitor CII use over time.

#### 2.3.1 Commercial Water Audits

Ventura Water currently offers audits to its CII customers. So far, there has been minimal participation in this program. Future practices may include directly contacting large CII water users and providing commercial customers with support and incentives to improve their water use efficiency.

### 2.3.2 Indoor Water Efficiency Devices and Appliances

Ventura Water does not currently offer commercial equipment incentives; however, future opportunities exist to achieve great commercial indoor water savings. Commercial water savings exist with conservation measures including replacement of toilets, urinals, clothes, washers, cooling towers, food steamers, ice machines steam sterilizer, water brooms, or dry vacuum pumps to water efficient equipment. Another approach is to calculate water savings on a case-by-case basis including industrial process water use reduction, industrial laundry retrofits, car wash recycling systems, water efficient commercial dishwashers, and wet cleaning. As residential water use reductions plateau, Ventura Water plans to analyze the effectiveness of providing monetary incentives for conservation measures stated above.

### 2.3.3 Outdoor Water Efficiency, Devices, and Appliances

Landscape accounts comprise of approximately 3 percent of total water use. The City's metered landscape uses include assessment districts, contract parks, City parks, and other large irrigation areas. Ventura Water provides rebates and giveaways to encourage water conservation for commercial outdoor irrigation.

Modern irrigation controllers use local weather and landscape conditions to tailor watering schedules to actual conditions at the site. EPA WaterSense controllers can save an average of 30.1 gallons per day (gpd). In June 2016, Ventura Water launched a Smart Irrigation Controller Program. Qualifying CII customers can receive a free WBIC, professional installation, and on-site training. To date, over 609 controllers have been installed for an estimated savings of 25 AFY. This program continues to be offered to Ventura Water customers.

Year	Commercial Controllers
2016	-
2017	16
2018	43
2019	34
2020	17
Total	110

The City has also offered turf removal rebates and free high efficiency nozzles to commercial customers. Additional opportunities for commercial outdoor irrigation may be evaluated by Ventura Water based on available funding and staffing.

## 2.4 Public Information and Outreach

Public information and outreach play an important supporting role in Ventura Water's conservation efforts. It is important to the community to prevent water waste through public outreach and to increase public awareness of water supplies, infrastructure, service delivery, and treatment systems. It is the City's goal to enhance the public's knowledge of Ventura Water's purpose and the scope of our responsibilities in providing water and wastewater services to our customers.



### 2.4.1 School Education Programs

Through the Green School Program, Ventura Water offers free educational classroom presentations to students in Kindergarten through 12<sup>th</sup> grade within the Ventura Unified School District. Teachers are notified of the program via email and brochure mailers. Lesson plans are grade-specific and aligned with Next Generation Science Standards. All lesson plans included hands-on activities, covering topics such as water conservation, water resource management, watershed protection and more. Ventura Water reaches approximately 6,000 students in 230 different classrooms and 17 different schools in a single year. Since 2017, Ventura water has reached over 30,000 students. This program aims to bring awareness to the importance of local water resource management and water conservation as a way of life.

School Year	Students Reached	Classroom Presentations
2016-2017	-	-
2017-2018	6,210	240
2018-2019	5,800	234
2019-2020	4,150	125
2020-2021	Postponed due to COVID-19	-

The Green School Program benefits water conservation programs and creates future environmental and water stewards. Each year, Ventura Water sponsors the annual Green Schools Award for schools who demonstrate extraordinary leadership in water conservation and watershed protection. Ventura Water also provides a monetary award to help further fund sustainability projects at schools in the City. Past winners have created programs in schools that increase resilience and reduce waste and water consumption.

### 2.4.2 Public Information and Outreach

Ventura Water partners with neighboring jurisdictions and non-profits to promote water conservation in several different ways. The City also conducts its own education and outreach efforts using a variety of tools. The following are frequently used to communicate information about water use efficiency:

- Monthly E-Newsletter. Ventura Water provides a monthly newsletter with information on capital improvement projects, conservation programs, public meetings, workshops, and special events.
- Website. Ventura Water regularly updates the website with FAQ's, public notices, water quality data, water conservation information, project updates, and more.
- Social Media. Ventura maintains an active and engaged presence on Facebook, Twitter, YouTube, and Instagram.

- Targeted Outreach Materials. Customers receive brochures, an annual mailer, postcards, and door hangers, which includes information on water conservation programs and rebates.
- Conservation Give-Aways. Ventura Water continues to offer customers water conservation giveaways including “Doing Our Part to Save Water” yard signs for water-wise gardens, low-flow showerheads, faucet aerators, toilet leak detection kits, shower timers, spray nozzles, and dish squeegees.

With the adoption of the AMI portal, WebConnect, residential customers receive an email and have access to water usage reports. Currently, the program is focused on leak detection and has proved successful at identifying leaks and getting them resolved in a timelier manner through customer interaction. Web Connect now allows commercial customers to access water use information.

### 2.4.3 Facility Tours

Beginning in 2016, Ventura Water partnered with the MERITO Foundation, a local-based nonprofit organization dedicated to providing meaningful watershed experiences to multicultural youth and their community. Students, parents, and educators are invited to visit the Ventura Water Reclamation Facility for a day of hands-on science-based learning. Students tour the Ventura Water Reclamation Facility, conduct water quality testing out of Ventura Water’s on-site wildlife ponds, and assess ecosystem health through bird species identification. Through this field experience, students are exposed to careers in water science and the many roles and responsibilities necessary to sustain a safe and healthy environment. Ventura Water offers free field trips of the Ventura Water Reclamation Facility to the public throughout the school year. Teachers and educators can schedule a field trip on Ventura Water’s website.

School Year	Students Reached
2016 – 2017	500
2017 – 2018	600
2018 – 2019	500
2019 - 2020	Postponed due to COVID-19
2020 – 2021	Postponed due to COVID-19

### 2.4.4 Water Awareness Events

Ventura Water, in partnership with the City’s Environmental Sustainability Department, offers monthly workshops that cover water wise and sustainable gardening practices. In addition, Ventura Water attends 15 to 20 public outreach events per year. Staff provide giveaways and informational handouts to promote water conservation programs and practices.

#### **2.4.5 Public Information Survey/Market Research**

Public information surveys are a tool the City uses for its general plan update and other planning purposes. A potential new way to evaluate customer awareness, attitudes, and willingness to adopt water conservation practices is to conduct water specific surveys and market research. This has the potential to help Ventura Water quantify past conservation efforts and identify and evaluate new approaches.

#### **2.4.6 Targeted Outreach**

Ventura has significantly reduced gpcd due to water conservation efforts and several external factors. The City anticipates that participation in residential programs, including rebates, will steadily wane as the number of homes eligible for participation declines. If the City continues its existing residential conservation programs at the same level seen in previous years, the gpcd is likely to decrease slightly but then reach a point where most residential customers are “efficient” with little room for additional savings. To maintain participation at levels seen in the past, Ventura will be proactive in promoting conservation programs, not just broad outreach, but targeted outreach to find the remaining customers that could benefit from programs.

If funding and staffing allows, the City can increase outreach to residential and commercial customers with above normal water use. When AMI is installed at 100% of City meters, City staff could identify abnormal water use trends and provide educational information and water surveys to identify potential ways to reduce water use.

The City updated WebConnect to improve water usage interface for both residential and commercial customers. The program’s ability to track hourly water usage may improve behavioral change and result in increased water use efficiency over time.

### **2.5 Recycled Water Use**

Recycled Water Use will support the following water conservation program goals:

- Reduce Outdoor Water Use
- Improve Resource Management

The Ventura Water Reclamation Facility (VWRF) was expanded in 1972 to include tertiary filters to provide filtered effluent for both water reclamation and discharge to the Santa Clara River Estuary. Effluent reuse for irrigation is an integral part of the Recycled Water Program. Use of recycled water represents a reduction in demand on the drinking water supply of approximately 325 million gallons per year. Ventura Water supplies recycled water from the VWRF to golf courses, parks, and other irrigation areas. The City also provides landscape irrigation for Marina Park and areas near Olivas Drive and in the Harbor area.

The City is planning a potable reuse facility to increase beneficial use of recycled water and as such, the City does not plan to expand the recycled water system beyond this project but will continue to deliver the recycled water that has been historically served from the VWRF.

### **2.5.1 VenturaWaterPure**

Recycled water could be put to beneficial potable reuse. 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 Santa Clara River Estuary. 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, that is one component of the VenturaWaterPure Program.

The City of Ventura is currently in the planning phases for the VenturaWaterPure Program that includes the state-of-the-art AWPF. The VenturaWaterPure Program consists of several capital improvement projects and will be a new, locally owned source of highly purified drinking water that provides Ventura with a long-term drought resilient water supply solution. On October 14, 2019, Ventura City Council unanimously voted to certify the EIR for the Ventura Water Supply Projects. Following completion of the environmental review process, the next steps include permitting, final design, and bidding for construction. The project is anticipated to initially produce at least 2,800 AFY and ultimately produce at least 4,000 AFY.

### **2.5.2 Greywater**

The Ventura County Building Code establishes minimum requirements for the installation of greywater systems in occupancies regulated by the Department of Housing and Community Development (HCD). It is intended to provide guidance to code users while providing flexibility that will encourage the use of greywater.

The City provides this information to customers interested in installing greywater systems. Ventura Water regularly holds WaterWise Gardening classes that offer educational information and materials regarding greywater and how residents can properly install these systems in their homes. The benefits of greywater are to reduce potable water use. Although greywater systems are complex and do not result in significant water savings, Ventura will continue providing information to water customers who are interested.

### **2.5.3 Mobile Reuse Program**

Due to anticipated future drought conditions and potable water shortages, Ventura expanded the use of recycled water permitted under the Recycled Water Use Permit to allow delivery of recycled water for irrigation. In response to the drought in 2016, the City launched a Mobile Reuse Program to provide high-quality recycled water for local residents and commercial businesses. All participants must attend a training and receive a permit from the City to ensure compliance with recycled water use guidelines. The recycled water is picked up at the Fill Station located at the Ventura Water Reclamation Facility. Residents, 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.

Year	Acre-Feet Utilized through Mobile Reuse Program
2016	8.3
2017	16.4
2018	14.5
2019	12.3
2020	Postponed due to COVID-19

Benefits of the program included expanded recycled water usage in the City and conservation of potable water. Since 2016, Ventura Water has offset potable water demands with recycled water by 41.5 acre-feet through this program. The Mobile Reuse Program has had strong interest from select residents and businesses, however, this program was postponed in 2020, due to COVID-19 and has just recently resumed operations.

## 2.6 Stormwater

As stormwater flows across the surface of our community, we have the opportunity to retain or capture these flows before they are diverted into stormwater drains that discharge into our rivers and ocean. By retaining this flow, we can allow the water to percolate into the ground and replenish shallow underground aquifers, which are an important source of water for shrubs and trees in our community.

When stormwater is captured, the water can be used later to offset landscape irrigation demands. In addition, streams and other natural habitat can become overwhelmed by the greatly increased volume and speed of stormwater flows during rain events, resulting in severe erosion and ecosystem impacts. These increased flows also increase the risk of flooding and necessitate costly flood prevention improvements. Therefore, the capture of stormwater flows can assist us in protecting our watersheds.

Stormwater capture and use supports the following Water Use Efficiency Goals:

- Reduce Outdoor Water Use
- Improve Resource Management

### 2.6.1 Residential Rainwater Collection

The City of Ventura Environmental Sustainability Department and Ventura Water work together to implement residential rain collection to offset potable water use in landscaping. Ventura offers residential customers a 50% off voucher to purchase a 50-gallon rain barrel at a local supply store. As of December 2020, Ventura Water has given out a total of 680 vouchers worth over \$30,000. This program continues to be offered to Ventura Water customers.

Year	Rain Barrel Voucher
2016	295
2017	122
2018	92
2019	109
2020	62
Total	680

Benefits of a residential rainwater collection include a reduction of potable water use. However, actual water savings is difficult to quantify. Recent years have had little precipitation and participation has declined considerably. Once stored rainwater is used it is not likely to be replenished frequently enough to measurably offset the use of potable water. However, providing these rebates is useful because it demonstrates to customers that the City values outdoor water conservation and water-wise gardening. Ventura anticipates continuing this program and will re-evaluate programmatic success as funding is depleted.

### **3 Implementing the Water Efficiency Plan**

#### **3.1 Sources of Funding**

Existing water conservation programs are currently funded by grants and water rates. Future conservation practices may be funded by Capital Improvement Program budgets. Master Plan Condition Assessments are used to identify repairs at treatment facilities, pump stations, and storage tanks and prioritize projects for inclusion in the CIP.

##### **3.1.1 Drought Rates and Surcharges**

Since 2012, the City has implemented conservation pricing and a tiered rate structure that considers operating and capital costs during normal and drought years. Ventura's rate structures are implemented every five years after a Cost of Service and Rate Design Study is completed. Rates are modified during droughts and water shortage events. Recently, the City's annual Comprehensive Water Resources Report concluded that Ventura's water supply resources were stable enough for the City to reduce rates to a Stage 2 Water Shortage, from a Stage 3 Water Shortage that was in place for five years. Currently, water rates are set in 4 blocked tiers and billed in units of hundred cubic feet (HCF). One HCF equals 748 gallons. If adopted by the Council in July 2021, water shortage surcharge rates apply when the City is in a Stage 2 or higher water shortage event and rates will be changed to a 3-tier system.

##### **3.1.2 Grants**

Many of the water conservation programs described are partially funded by grants from Proposition 84. Grant funding helps alleviate the financial burden on ratepayers. Currently, these grant funds are being phased out and funding has been almost fully expended. The City will continue to search for new grant opportunities. However, the City will need to look at how to invest in programs without grant funding moving forward.