



AGENDA

Water Shortage Task Force

Suzanne McCombs, Task Force Chair
Edward McCombs, Task Force Vice Chair
Bryan Bondy, Task Force Member
Ted Cook, Task Force Member
Rob Corley, Task Force Member
Diane de Mailly, Task Force Member
Douglas Hahn, Task Force Member

Don Jensen, Task Force Member
Robert McCord, Task Force Member
Marty Melvin, Task Force Member
Don Mills, Task Force Member
Ed Summers, Task Force Member
Diane Underhill, Task Force Member

TASK FORCE MEETING

WEDNESDAY, NOVEMBER 19, 2014, 6:00 P.M.

VENTURA WATER MAINTENANCE YARD, 336 SANJON ROAD, VENTURA

ROLL CALL

COMMITTEE ITEMS

1. APPROVAL OF MINUTES, SPECIAL MEETING ON NOVEMBER 5, 2014

Staff: Sylvia Lopez, Administrative Secretary

Recommendation: Approve November 5, 2104 meeting minutes

2. EX PARTE COMMUNICATION

Staff: Shana Epstein, Ventura Water General Manager

Recommendation: Receive communication.

3. STATE CONSERVATION REPORTING UPDATE

Staff: Ryan Kintz, Environmental Services Specialist

Recommendation: Receive and file report.

4. PARKS DROUGHT RESPONSE ACTIONS

Staff: Elena M. Brokaw, Parks, Recreation & Community Partnerships Director

Recommendation: Receive presentation.

5. POTENTIAL REBATE AND INCENTIVE PROGRAMS

Staff: Nancy Broschart, Management Analyst and Jill Sarick, Environmental Services Specialist

Recommendation: It is recommended that the Water Shortage Task Force evaluate the need and options for the creation of a Water Efficiency Customer Incentive Program in order to provide a recommendation to the City Council, if desired. Staff is recommending two elements: irrigation efficiency device(s) rebates in conjunction with a water survey and a turf replacement incentive with funding proposed to be increased at each successive drought stage for both programs.

6. WATER SHORTAGE CONTINGENCY PLAN REVISIONS

Staff: Karen Waln, Management Analyst

Recommendation: Receive and approve with or without additional revisions the revised Water Shortage Contingency Plan as prepared by the Task Force Subcommittee Members Corley, Underhill, Jensen and Cook.

7. TASK FORCE MEETING DATE CHANGE AND ADDITION

Staff: Shana Epstein, Ventura Water General Manager

Recommendation: Approve the following changes to the Task Force special meeting schedule: (1) Change meeting date from Wednesday, December 3, 2014 to Tuesday, December 16, 2014, and (2) Add a meeting on Wednesday, January 14, 2015. All meetings will be held starting at 6:00 p.m., at the Ventura Water Maintenance Yard, 336 Sanjon Road, Ventura.

- 8. PUBLIC COMMENT** – (For items not listed on this agenda, but within the jurisdiction of the Task Force. Note that no general discussion of such items, or action on such items, may be taken by the Task Force. At this time, the Task Force will provide an opportunity for the public to address them on any subject, which is not scheduled on this Agenda but is within the jurisdiction of the Task Force. Comments are limited to three (5) minutes.)

9. ADJOURNMENT – NEXT MEETING WEDNESDAY, DECEMBER 3, 2014

Minutes 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 Thursday, November 13, 2014 at 3:00 p.m. in the Ventura Water Office, 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) 652-4503 or the California Relay Service at (866) 735-2929. Notification by Monday, November 17, 2014, at 5:00 p.m. will enable the City to make reasonable arrangements for accessibility to this meeting.

Agenda Item Number 1
Approval of Minutes
November 5, 2014 Meeting
November 19, 2014



Draft Minutes

Water Shortage Task Force

Suzanne McCombs, Task Force Chair
Edward McCombs, Task Force Vice Chair
Bryan Bondy, Task Force Member
Ted Cook, Task Force Member
Rob Corley, Task Force Member
Diane de Mailly, Task Force Member
Douglas Hahn, Task Force Member

Don Jensen, Task Force Member
Robert McCord, Task Force Member
Marty Melvin, Task Force Member
Don Mills, Task Force Member
Ed Summers, Task Force Member
Diane Underhill, Task Force Member

Shana Epstein, Ventura Water General Manager

November 5, 2014

The Water Shortage Task Force met in the City of Ventura Maintenance Yard Facility, Assembly Room, 336 Sanjon Road, Ventura, at 6:00 pm.

ROLL CALL

Present: Task Force Chair Suzanne McCombs, Members Ted Cook, Rob Corley, Diane de Mailly, Don Jensen Robert McCord, Marty Melvin, Don Mills, Ed Summers and Diane Underhill.

Absent: Task Force Vice Chair, Edward McCombs, Members, Bryan Bondy and Douglas Hahn.

TASK FORCE ITEMS

1. APPROVAL OF MINUTES, SPECIAL MEETING ON OCTOBER 22, 2014

Recommendation: Approve OCTOBER 22, 2014 meeting minutes.

Task Force Member Diane de Mailly moved to approve, Task Force Member Marty Melvin seconded. The vote was as follows:

AYES: Suzanne McCombs, Ted Cook, Rob Corley, Diane de Mailly Don Jenson, Robert McCord, Marty Melvin Don Mills, and Diane Underhill.

NOES: None.

ABSTAIN: Ed Summers.

Chair Suzanne McCombs declared the motion carried.

2. EX PARTE COMMUNICATION

Recommendation: Receive communication.

Speaker(s): None.

Staff: Shana Epstein, General Manager.

Member(s) of the public: None.

3. DROUGHT RATE ALTERNATIVES

Recommendation: Receive presentation.

Speaker(s): None.

Staff: Shana Epstein, Ventura Water General Manager.

Member(s) of the public: Daniel Cormode, David Tyrone, Leslie Purcell.

4. AGGREGATE OF LARGE WATER USERS

Recommendation: Receive and file report.

Speaker(s):

Staff: Shana Epstein, General Manager.

Member(s) of the public: Daniel Cormode.

5. UNTREATED WATER USAGE

Recommendation: Receive and file report.

Speakers(s):

Staff: Shana Epstein, Ventura Water General Manager

Member(s) of the public: Daniel Cormode.

6. RESIDENTIAL CUSTOMER SURVEY - % OUTDOOR WATER USAGE

Recommendation: receive and file report.

Member(s) of the public: Daniel Cormode.

7. **PUBLIC COMMENT** – (For items not listed on this agenda, but within the jurisdiction of the Task Force. Note that no general discussion of such items, or action on such items, may be taken by the Task Force. At this time, the Task Force will provide an opportunity for the public to address them on any subject, which is not scheduled on this Agenda but is within the jurisdiction of the Task Force. Comments are limited to three (5) minutes.)
8. **ADJOURNMENT – NEXT MEETING WEDNESDAY, NOVEMBER 19, 2014**
The meeting was adjourned 8:32pm. The next meeting, Wednesday, November 19, 2014, at 6:00pm located at the Ventura Maintenance Yard Facility, 336 Sanjon Road, Ventura.

Minutes 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 Thursday October 30, 2014 at 5 p.m. in the Ventura Water Office, 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) 652-4503 or the California Relay Service at (866) 735-2929. Notification by Monday, November 3, 2014 at 5:00 p.m. will enable the City to make reasonable arrangements for accessibility to this meeting.

Agenda Item Number 2
Ex Parte Communication
November 19, 2014

No Written Report for this Item

Agenda Item Number 3
State Conservation Reporting Update
November 19, 2014

Administrative Report for this Item



ADMINISTRATIVE REPORT

Date: November 12, 2014

Agenda Item No: 3

Meeting Date: November 19, 2014

To: WATER SHORTAGE TASK FORCE

From: SHANA EPSTEIN, VENTURA WATER GENERAL MANAGER

Subject: STATE CONSERVATION REPORTING UPDATE

RECOMMENDATIONS

Receive and file report.

DISCUSSION

Attached is the updated Ventura Water production numbers for 2014 vs 2013. Ventura Water began reporting this method of production comparison to the State Water Resources Control Board (SWRCB) in June 2014, as a means to track water conservation efforts. In addition, the Task Force agreed this same form of measurement should be how the City determines success of achieving the stated conservation goals.

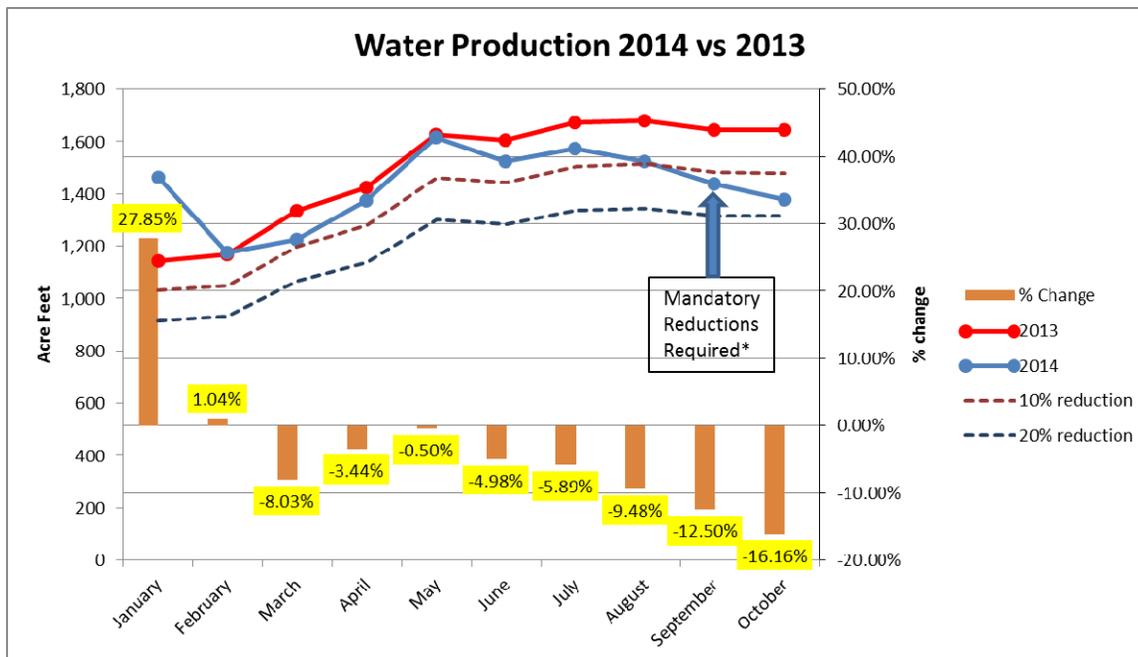
Starting October 15, 2014, the SWRCB required reporting Residential Gallons Per Capita Day (R-GPCD). These numbers were calculated for September and October 2014 and are listed below. Attached is the SWRCB guidance document on the methodology for calculating R-GPCD, which is different from the guidelines previously established with the 2010 Urban Water Management Plan. The total population served number is from the City's 2010 Urban Water Management Plan. This number was used because it was recommended by the SWRCB, and it provides the most recent calculated representation of Ventura Water's service population which is backed by official documentation.

Water Production Comparison for 2013 vs 2014

Month	2013	2014	% Change
January	1,145	1,465	27.87%
February	1,167	1,179	1.03%
March	1,334	1,227	-8.00%
April	1,422	1,373	-3.47%
May	1,626	1,617	-0.51%
June	1,603	1,523	-4.99%
July	1,673	1,574	-5.92%
August	1,681	1,522	-9.48%
September	1,646	1,440	-12.50%
October	1,645	1,379	-16.16%
November	1,396		
December	1,370		
Grand Total for the Year	17,709	14,300	

All values in Acre Feet

Note: All values do not include Saticoy Country Club



*Note: Mandatory reductions required under the City of San Buenaventura's Resolution No. 2014-057 and Ordinance No. 2014-013.

Residential Gallons Per Capita Day (R-GPCD)

R-GPCD	Total Monthly Production	Percent Residential Use	Unit Conversion Factor	Total Population Served	
Month	TMP (AF)	PRU	C (325,851 gal/AF)	TPS	R-GPCD
September	1,440	63.83%	325,851	113,478	87.98
October	1,379	66.56%	325,851	113,478	87.86

Note: All values do not include Saticoy Country Club

Note: Values subject to change due to updates in billing records.

Prepared by Ryan Kintz, Environmental Services Specialist

For



Shana Epstein
Ventura Water General Manager

Attachment A: SWRCB Residential Gallons Per Capita Day Calculation Methodology

ATTACHMENT A

**SWRCB RESIDENTIAL GALLONS
PER CAPITA DAY CALCULATION
METHODOLOGY**

Instructions for Estimating Residential Gallons Per Capita Day (R-GPCD) in Completing Monthly Urban Water Supplier Report

Beginning October 15, 2014, urban water suppliers must estimate and report the number of gallons of water per person per day used by the residential customers it serves (Residential Gallons per Capita Day or R-GPCD) using the [online reporting tool](#) for submitting monthly water production data.

The following equation is suggested for estimating monthly R-GPCD (urban water suppliers may use another method for calculating monthly R-GPCD, in which case an explanation of the method should be provided in report field entitled "Qualification"):

$$\text{R-GPCD} = [(\text{TMP} * \text{PRU} * \text{C}) / \text{TPS}] / \text{number of days in the month}$$

Where: TMP=Total Monthly Potable Water Production

PRU=Percent Residential Use

C=Unit Conversion Factor

TPS=Total Population Served

Unit Conversion Factors	
If your Total Monthly Potable Water Production (TMP) is in	Use this Unit Conversion Factor (C)
Gallons (G)	1
Million Gallons (MG)	1,000,000
Hundred Cubic Feet (CCF)	748
Acre Feet (AF)	325,851

Urban water suppliers are already required to report monthly all of the variables used in the suggested R-GPCD calculation method. The online reporting tool has been preloaded with Total Population Served (TPS) as provided in your 2010 Urban Water Management Plan or from your most recent Annual Report submitted through the Electronic Annual Reporting (EAR) System. If your Total Population Served (TPS) data is out of date, it should be updated using the Department of Water Resource's [simplified method for estimating service area population](#).

When estimating Percent Residential Use (PRU), we recommend using billing data for the volume of water provided to residential customers from the previous year (for the same reporting month) as a percentage of Total Monthly Potable Water Production (TMP). In cases where billing periods are not based on calendar month, the urban water supplier should use discretion in selecting the most comparable and appropriate billing period. Residential use should also include water provided to multi-family units as well as any water used for residential landscaping.

Agenda Item Number 4
Parks Drought Response Actions
November 19, 2014

Administrative Report for this Item



ADMINISTRATIVE REPORT

Date: November 12, 2014

Agenda Item No: 4

Meeting Date: November 19, 2014

To: WATER SHORTAGE TASK FORCE

From: SHANA EPSTEIN, VENTURA WATER GENERAL MANAGER

Subject: PARKS DROUGHT RESPONSE ACTIONS

RECOMMENDATION

Receive presentation.

DISCUSSION

In response to the drought, the Parks, Recreation & Community Partnerships Department has taken drastic measures to reduce water usage at City parks. Water consumption at all parks is being reduced, and a watering priority has been developed to target larger reductions in specific park areas. The department priority set for watering is:

- Sports Areas: High Priority
- Tourist Areas: Medium Priority
- Passive Areas: Low Priority

This priority watering practice has resulted in an overall reduction of 22.55% in water usage at all parks when comparing May-August of 2014 to May-August of 2013.

Prepared by Ryan Kintz, Environmental Services Specialist

For

A handwritten signature in blue ink, appearing to read "Shana Epstein", written over a horizontal line.

Shana Epstein
Ventura Water General Manager

**DOING
OUR PART
TO SAVE
WATER**



Park's Drought Response Actions

Elena Brokaw

Director, Parks/Recreation and Community Partnerships Department

Water Shortage Task Force

November 19, 2014

City Parks Actions

- **Water by Priority**
- **Safety**
- **Aesthetics**
- **Passive and low-watered areas**
- **Drought signs in parks – Placed in July**

DROUGHT

Due to the extensive drought, the City of Ventura is reducing irrigation at our parks and public spaces. Our priority watering areas are the sports fields, which will receive the usual amount of watering (for safety reasons.) Grass and turf areas will be allowed to go brown. Help do your part to conserve water too. Thank you for your understanding.

CITY OF VENTURA
PARKS, RECREATION & COMMUNITY PARTNERSHIPS
cityofventura.net

Save Our WATER
saveourh2o.org

VENTURA WATER
venturawater.net

City Parks Actions Continued

Water By Priority

- 1) **Sports Areas- Highest Priority.** Keeping green for health and safety reasons.
- 2) **Tourist Areas – Medium Priority.** Reduced watering but allowing grass to stay green.
- 3) **Passive Areas – Lowest Priority.** Large water reductions just enough to keep grass alive.

1,006 Acres of City Parkland



Sports Areas High Use Areas

1) Sports Areas: **High Priority**

- Community Park
- Fritz Huntsinger
- West Park
- Harry Lyons
- Camino Real

Compared to Summer 2013:

Summer 2014 = 15.5% reduction*

Note: Subject to change due to updates in billing data.



High Use – Swim Meets, Soccer Games, Baseball Games, Football Games, BMX Races etc.



Tourist Areas

2) Tourist Areas: **Medium Priority**

- City Hall
- Promenade Park
- Harbor at Spinnaker
- Surfers Point
- California Mini Park
- Beach Parking Structure
- City Beach and Pier

Compared to Summer 2013:

Summer 2014 = 35% reduction*

Note: Subject to change due to updates in billing data.

City Hall Before Drought



City Hall After Drought



Passive Areas

3) Passive Areas: **Lowest Priority**

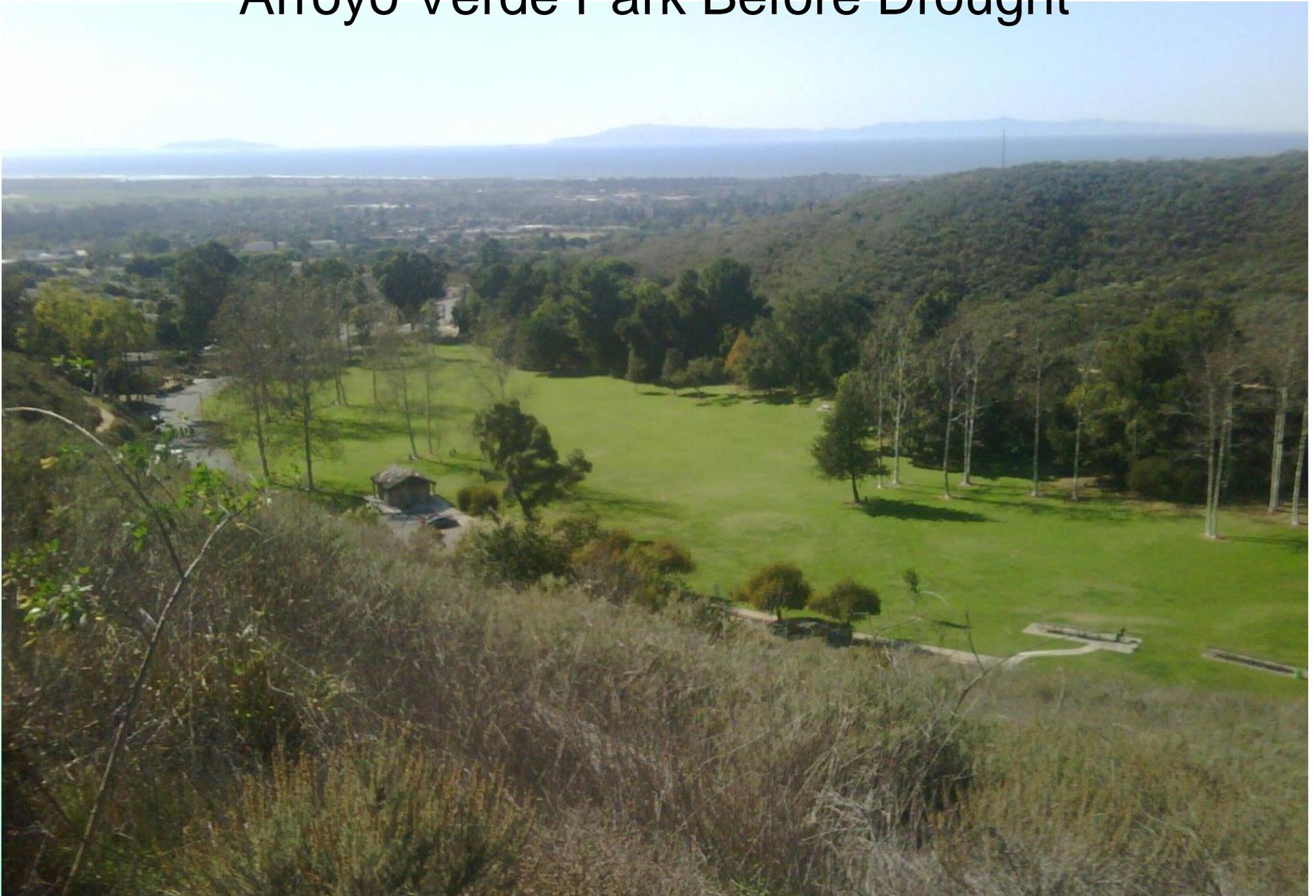
- All other areas
- Thille Park
- California Mall
- Medians (40)
- Linear Parks (31)
- Parking Lots (23)
- Etc.

Compared to Summer 2013:

Summer 2014 = 44% reduction*

Note: Subject to change due to updates in billing data.

Arroyo Verde Park Before Drought



Arroyo Verde Park After Drought



Agenda Item Number 5
Potential Rebate and
Incentive Programs
November 19, 2014

Administrative Report for this Item



ADMINISTRATIVE REPORT

Date: November 7, 2014

Agenda Item No: 5

Meeting Date: November 19, 2014

To: WATER SHORTAGE TASK FORCE

From: SHANA EPSTEIN, VENTURA WATER GENERAL MANAGER

Subject: POTENTIAL REBATE AND INCENTIVE PROGRAMS

RECOMMENDATION

It is recommended that the Water Shortage Task Force evaluate the need and options for the creation of a Water Efficiency Customer Incentive Program in order to provide a recommendation to the City Council, if desired. Staff is recommending two elements: irrigation efficiency device(s) rebates in conjunction with a water survey and a turf replacement incentive with funding proposed to be increased at each successive drought stage for both programs.

PREVIOUS TASK FORCE ACTION

At its October 22 meeting, the Water Shortage Task Force received a presentation on existing rebate and incentive programs offered in the tri-county region and a list of possible devices and measures that could be included in a potential incentive program for Ventura.

SUMMARY

Managing water demand is an important strategy in meeting the challenges of a water shortage. Incentive programs to promote water efficiency are commonly employed to motivate customers to save water. Ventura is the only city in the tri-county region that does not offer any kind of incentive or rebate to encourage residents to participate in greater water efficiency measures. In calling for a mandatory 20% reduction from our customers and enforcing water waste prohibitions, a customer incentive program will provide a positive counter balance and an opportunity for us to work together with the community to save water. Since most discretionary water use is outdoors, staff proposes two elements that target irrigation reductions: rebates for irrigation efficiency

device(s) based on individual property needs and a turf replacement per square foot incentive.

DISCUSSION

One task of the Water Shortage Task Force's scope, as defined by the City Council, was to provide a recommendation on the need for water efficiency incentives and what types might be best suited for Ventura. Our community has been excellent water stewards for decades and funding for water conservation programs since the last drought has been minimal. Over the past two years, Ventura Water has unsuccessfully tried to secure federal and state grant funding for water efficiency programs. Funding agencies cite the need to participate in a larger regional effort, which is not always possible because most cities/agencies are participating in Metropolitan Water District (MET) programs.

To meet water reduction targets today, establishing a water efficiency incentive program is recognized to be a critical component. While water conservation programs typically involve up-front costs, including revenue losses, the full benefits of conservation are realized in avoided costs to system expansion. Deferring investment in such facilities has proven to provide significant cost savings over the long-term. Also, conservation measures have the added benefit of providing environmental paybacks that outweigh short-term inconveniences incurred by drought measures.

Ventura Water will continue to seek grant funding for water efficiency incentive programs, but until then, it is proposed that funding be redirected from retained earnings and later, any avoided water supply penalty monies (Casitas rental charges or penalties for pumping over allocations set by Fox Canyon Groundwater Management Agency).

Analysis

The following goals were used to guide the development of the proposed Water Efficiency Customer Incentive program:

- Show measurable water-savings to meet water reduction goals as mandated by drought stages,
- Provide a financial investment avenue that will encourage customers to manage their water demand to minimize adverse impacts to supply, and
- Reduce customer confusion by offering incentives comparable to those available to participating MET agencies via the "BeWaterWise" program.

A number of data sources were analyzed to develop water saving metrics including customer billing data, published landscape measures, irrigation efficiency devices, and

indoor efficiency measures and devices. The conclusion was that incentives targeting irrigation efficiency provided the best opportunity to save water, at the lowest cost. As a companion for customers ready to do more, staff also recommends establishing a turf replacement program. Despite the larger investment, this program can achieve greater water savings due to its popularity and the potential to permanently reduce water consumption through these types of conversions.

Irrigation Efficiency Program

The irrigation efficiency incentive program would target properties with older irrigation systems that would benefit from updated devices and would include:

1. A water survey of a property (with an actively irrigated landscaped area) which identifies what updated devices might be beneficial.
2. Based on the survey, customers will be encouraged to install any combination of the following: rain sensor, smart irrigation controller, pressure regulator and/or high efficiency sprinklers nozzles.
3. The rebate portion of the program could be managed by a third party or agreements could be developed with local irrigation vendors to provide reduced pricing (and Ventura Water funds the remaining portion).
4. Before and after photos and customer consumption data would be entered into a tracking database to confirm water savings.
5. Participants must agree that the irrigation system is not altered for a set period of time (generally three years).

While there are a variety of cost models, it is proposed that funding be allocated to each water shortage stage, qualified properties are eligible for incentives up to \$300, and the program be operated on a first come, first serve basis. It is estimated each average residential property would realize a 30% water savings of outdoor water use or .05 acre feet or 17,000 gallons annually.

It is proposed that any property with more than one acre of actively irrigated landscape be eligible for incentives up to \$600, double the base amount. In the July/August 2014 billing cycle, water usage reported by dedicated irrigation meters was 14% of the overall total and 42% of non-residential water used. Greater water savings could be achieved by these larger properties, which supports a higher incentive dollar amount.

Turf Replacement Program

As presented in October, there are many well-established incentive lawn-to-garden programs. It is estimated that a turf conversion to garden for an average property will save about .14 acre feet or 45,000 gallons. Greater water savings are realized when grass is replaced with synthetic turf. Therefore, while it is recognized that gardens are the environmentally superior option, it is proposed that this program include synthetic lawns that meet certain requirements.

The program, which could be managed by a third party, would include:

1. Measurement of turf area during a water survey of a property (with an actively irrigated landscaped area).
2. Customer submits an application and before picture to reserve incentive amount.
3. Customer submits receipts up to \$800 for qualifying materials (or \$2 per square foot) and receives check.
4. Before and after photos and customer consumption data would be entered into a tracking database to confirm water savings.
5. Participants must agree that the outdoor area is not altered for a set period of time (generally ten years).

Again, it is proposed that funding be allocated to each water shortage stage, each property be eligible for incentives up to \$2 a square foot (up to a total of \$800), and the program be conducted on a first come, first serve basis.

It is proposed that any property with more than one acre of actively irrigated landscape be eligible for incentives up to \$1,600, double the base amount.

IMPACTS

Since October of 2014, staff has conducted 15 water surveys and is averaging about 5 surveys per week with existing staff. Certainly, there is an opportunity to offer more and in combination with an incentive package from the options above, the community would realize measurable water savings.

Enlisting the expertise from consulting firms that offer water conservation incentive program management may be an important strategy to effectively implement and manage the program. Staff has contacted several firms to gain insight into the typical administration costs and timelines for setting-up water efficiency programs. In most cases, a 10% administration fee would cover program management, but oversight by Ventura Water staff to manage the program and contract would be necessary.

Several programs already have legal terms outlined in participant applications, covering aspects of eligibility, terms of agreements, payments and reimbursements which could be used for developing our program.

The following is the proposed funding levels by each drought stage:

Drought Stage	Irrigation Efficiency (\$300 per property*)		Turf Replacement (\$800 per property*)		Est. Water Savings Per Acre Foot
	Funding	Customers*	Funding	Customers*	
20%	\$150,000	500	\$80,000	100	39.91
30%	\$150,000	500	\$160,000	200	53.80
40%	\$150,000	500	\$240,000	300	67.68
50%	\$150,000	500	\$320,000	400	81.56
	\$600,000	2,000	\$800,000	1,000	242.96

* Properties over one acre will be eligible for double the incentive amount

At each successive drought stage as water savings become more critical, incentive funding could be released and/or its need or amount evaluated. For example, if outdoor irrigation is entirely prohibited at 50%, funding for irrigation efficiency could be allocated to earlier stages only.

The incentive program at the proposed funding level will invest \$5,762 in incentive dollars per acre foot per year. As a frame of reference, the proposed in-lieu water supply fee per acre foot per year was calculated at \$10,686 and \$15,538 for Zone 1 and 2, respectively.

ALTERNATIVES

The Water Shortage Task Force may choose to:

- Not recommend the establishment of a Water Efficiency Customer Incentive program to the City Council, or
- Recommend different program elements or funding levels.

Prepared by Jill Sarick, Environmental Services Specialist

For

Shana Epstein
Ventura Water General Manager

Agenda Item Number 6
Water Shortage Contingency
Plan Revisions
November 19, 2014

Administrative Report for this Item



ADMINISTRATIVE REPORT

Date: November 12, 2014

Agenda Item No: 6

Meeting Date: November 19, 2014

To: WATER SHORTAGE TASK FORCE

From: SHANA EPSTEIN, VENTURA WATER GENERAL MANAGER

Subject: WATER SHORTAGE CONTINGENCY PLAN REVISIONS

RECOMMENDATION

Receive and approve with or without additional edits the revised Water Shortage Contingency Plan as prepared by the Task Force Subcommittee Members Corley, Underhill, Jensen and Cook.

DISCUSSION

The Task Force participated in a workshop on September 23, 2014 to gather policy ideas on the topics of (1) Water Shortage Stages; (2) Conservation Measures Associated with Water Shortage Stages; and (3) A Water Shortage Allocation Program. Following the workshop the Task Force members discussed how these policy ideas could be incorporated in to the Water Shortage Contingency Plan. Subsequently, at the October 8 and 22, 2014 Task Force Meetings, the Task Force made recommendations for revisions to the Water Shortage Contingency Plan.

The Task Force selected a subcommittee to incorporate their recommendations into a revised Water Shortage Contingency Plan. The subcommittee members included Members Corley, Underhill, Jensen and Cook. The subcommittee has prepared a revised plan for the Task Force to review (see Attachment A).

The Task Force is asked to approve the revised Water Shortage Contingency Plan as presented by the Subcommittee or make additional edits prior to approval.

Prepared by Karen Waln, Management Analyst II

For

A handwritten signature in blue ink, appearing to read "Shana Epstein", written over a horizontal line.

Shana Epstein
Ventura Water General Manager

ATTACHMENT A

**WATER SHORTAGE CONTINGENCY
PLAN REVISIONS**

Proposed Revisions to Water Shortage Contingency Plan

1.1 Overview

This chapter documents the City's Water Shortage Event Contingency Plan and Emergency Response Plan (ERP) per requirements of Section 10632 of the Urban Water Management Act.

A. Declaration of Purpose of Plan

The City of Ventura has developed a Water Shortage Event Contingency Plan (WSCP) to provide guidance if triggering events occur and identify corresponding actions to be taken during the various stages of a water shortage. The plan includes voluntary and mandatory stages which are intended to be fair to all water customers while having a minimum impact on business, employment and quality of life for residents.

The purpose of this WSCP is to:

- (1) keep water use within supply and delivery capability, based on recommendations of citizen's advisory Water Shortage Task Force and Water Commission;
- (2) define procedures to be used when supply cannot meet demand; and,
- (3) familiarize all of Ventura Water's customers (residential, business, industrial and institutional) with procedures to be implemented when voluntary or mandatory water restrictions are in effect.

The Ventura Water General Manager, or designated representative, shall keep the City Council informed of the conditions of water supply, system usage, delivery capacity, and make recommendations to the City Council as appropriate, using best professional judgment and considering current weather conditions, weather forecasts, river flow conditions, and water system operations, for either enactment of initial restrictions or change to an appropriate stage in the WSCP.

The WSCP outlines specific actions that respond to and manage the City's water supplies through various circumstances, particularly drought conditions. The California Department of Public Health and the Ventura County Health Care Agency may assist in determining whether an exception to any restrictions imposed according to the WSCP is necessary for the welfare, health, and safety of the public.

B. Water System Status in October 2014

Customers and Commitments

The City of Ventura owns, operates and maintains a water distribution system that provides domestic water service to a population of approximately 113,500 persons and has approximately 32,000 service connections, as established by the June 2013 Comprehensive

Water Resources Report (CWRR) and cited without revision in the May 1, 2014 CWRR update.

The City's existing water service area includes all areas 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 22.110.055). In 2014, about 7% of total water consumption is by customers outside City limits.

Baseline water demand established by the 2013 CWRR was 17,601 acre-feet per year (AFY). Demand for 2014 reported in the 2014 CWRR is 17,343 AFY. Demand for 2015 is projected by the 2014 CWRR to be 17,660 AFY; this quantity includes projected development of 350 new dwelling units per year.

Water demand is 47.5 acre-feet per day or 15.5 million gallons per day.

Water Supply

The City's domestic water supply is derived from Lake Casitas, surface and sub-surface water from the Ventura River, and from local groundwater basins. There are presently five water sources that provide water to the Ventura Water System, in addition to reclaimed water that can be used to offset potable demand:

- Casitas Municipal Water District (Casitas)
Water from Casitas may be used only in the territory of the Casitas Municipal Water District, which generally covers the west and midtown areas that represent about 30% of all water connections. Ventura Water is contracted to purchase 8,000 AFY but only required to purchase 6,000 AFY. Under severe drought conditions (lake levels below approximately 25% of capacity) the allocation could be reduced to 4,960 AFY. Current lake conditions are just above 50% of capacity. Additional water may be "rented" from Casitas MWD and used anywhere in the Ventura Water system. Rental charges are an ongoing cost to the City until the water is physically "returned" by reduced use of Lake Casitas water. Approximately 5,000 acre-feet of water from Lake Casitas was used by the Ventura Water system in 2014. This is projected to increase by 136 acre feet of demand within the Casitas MWD service area in 2015; however a 10% reduction in supply is expected, bringing the projected 2015 actual delivery to 4,622 AFY.
- Ventura River / Foster Park Area (Foster Park)
The 2014 CWRR reported that continuing drought conditions create an unknown supply from the Ventura River sources, projected in that report to be 2,000 AFY. Estimated reliable supply of 4,200 AFY was reported in the 2013 CWRR and confirmed in the 2014 CWRR for non-drought years.
- Mound Groundwater Basin (Mound)
Both the 2013 and 2014 CWRR show 4,000 AFY supply from the Mound groundwater basin. This groundwater basin covers the central-east part of Ventura approximately from Mills Road to Saticoy Avenue, from the hillsides to the Santa Clara River.

- Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)
Estimated reliable supply of 4,100 AFY was reported in the 2013 CWRR and reduced to 3,918 AFY in the 2014 CWRR due to restrictions imposed by the Fox Canyon Groundwater Management Agency. Located to the south of the Mound Groundwater Basin, the basin supplies the well field at the two golf courses located near the Santa Clara River, south of the 101 freeway.
- Santa Paula Groundwater Basin (Santa Paula Basin)
Located to the east of the Mound Groundwater Basin, the basin extends past City limits toward Santa Paula, with well fields located in and near Saticoy. Estimated reliable supply of 1,600 AFY was reported in the 2013 and 2014 CWRR. Water rights to six additional AFY were acquired in 2014. This is less than the maximum legal allocation of 3,000 AFY.

Total 2014 supply from non-recycled sources is 18,900 AFY plus 700 AFY of recycled water from the Ventura Water treatment plant for a combined total supply of 19,600 AFY. Demand projected by the CWRR is 17,343 AFY, or 88.5% of supply representing an 11.5% buffer between supply available and demand.

Total 2015 supply calculated in the 2014 CWRR is 19,560 – 20,960 AFY. The 2014 CWRR also provides a "worst case" drought conditions projected 2015 supply of 14,846 – 16,846 AFY. The significant differences are potential loss of ability to extract water from Ventura River sources plus a potentially reduced supply from Lake Casitas as that agency implements its own water shortage contingency plan.

The City also has a 10,000 acre-foot per year entitlement of water from the California State Water Project based in a fifty year contract established in 1985. To date the City has not utilized this water source because there are no facilities to get the water to the City. The contract requires an annual payment by the City, which in some years is partly offset by re-selling the allocation to other water agencies. Ventura indirectly received water from this allocation via the City of Oxnard during a severe drought in the 1990s.

Other potential sources of additional water supply include annexing land with water rights, desalinization of ocean water to potable water standards, increased filtration of groundwater supplies to reduce amount of water used to blend high TDS water, rebuilding well fields in the Ventura River, and increased distribution and use of treated wastewater.

Storage Capacity

The City currently has 43.2 million gallons of operational storage citywide. This represents 132.5 acre feet of water, or 2.7 days of usage.

C. Policy of Water Efficiency

It is the policy of Ventura Water to promote water conservation. The water supply to the City of Ventura 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 daily practicing

water conservation, regardless of whether voluntary or mandatory water restrictions are implemented or certain water shortage rates are applied. There are many simple, cost-effective ways to lower water use and reduce strain on water resources and infrastructure without compromising Ventura's quality of life. Customers of the Ventura Water System are encouraged to follow at all times the water conservation measures found at www.cityofventura.net/water/efficiency.

This WSCP recognizes the many Ventura Water customers who have voluntarily implemented water-saving landscape, plumbing, and other changes to permanently conserve water. Actions in this WSCP acknowledge cutbacks already made and the difficulty in making additional significant cutbacks for customers who have already reduced water use and invested heavily in water conservation measures.

D. Reduced Water Use during Water Shortage Events

This WSCP and other legal actions by the City establish actions that may be imposed on water users during Water Shortage Events. Such events may be a lengthy drought that has limited groundwater and surface water supplies, or an emergency condition brought about by an earthquake, fire, or other interruption in water delivery to the system. These actions are discussed in later sections of this WSCP.

E. Coordination with City Facilities and Departments

Ventura Water will coordinate with the other City departments to assure that City facilities and parks are being operated in a water efficient manner and to assist Ventura Water in attaining conservation goals. City facilities have a strong program of water and energy efficiency. Ventura Water and Parks will partner to review and reduce the irrigation of City property, and Ventura Water and Environmental Sustainability staff have a strong working relationship with our schools by providing educational programs to teach students how to reduce water usage. At least once each quarter Community Development, Economic Development, Public Works, City Manager, and Ventura Water will share information on near term and long term changes in supply and demand for water supply and wastewater treatment, differentiated into areas within the Casitas Municipal Water District and non-Casitas areas of the Ventura Water service area, and additional sub-areas as determined by the Ventura Water General Manager.

1.2 Causes for Restrictions

A. Water Shortage Event

If drought conditions cause a reduction in groundwater supplies or Ventura River flows to the extent that water demands within the Ventura Water System service area fall below predicted supply for that year in the most current Comprehensive Water Resources Report, the City may consider enacting voluntary or mandatory restrictions targeted primarily at reducing outdoor watering activities. Such restrictions would be based primarily on water supply availability and actual water use. Any such restrictions would be enacted pursuant to San Buenaventura Municipal Code, Chapter 22.170 Water Conservation, Section 22.170.010, Water Waste Prohibited, and enforced pursuant to applicable code provisions.

B. Definition of Drought

The following definition was 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.

Historical Droughts

Measurements of California water conditions cover only a small slice of the past. Widespread collection of rainfall and streamflow information began around the turn of the 20th century. During our period of recorded hydrology, the most significant statewide droughts occurred during 1928-34, 1976-77, 1987-92, and 2007-09. The last significant regional drought occurred in parts of Southern California in 1999-2002. Historical data combined with estimates created from indirect indicators such as tree rings suggest that the 1928-34 event may have been the driest period in the Sacramento River watershed since about the mid-1550s.

Source: <http://www.water.ca.gov/waterconditions/background.cfm>

C. Natural Disaster or Failure of Water System Facilities

If a natural disaster, such as an earthquake, fire, toxic spill or flood, or catastrophic failure of Ventura Water System facilities occurs, the City will enact restrictions as addressed in Table 1 of this WSCP. Such restrictions would be based on the varying circumstances as adjudged necessary and appropriate to respond to the emergency conditions by the City Council or the City Manager in the event the City Council cannot act in a timely manner. Any restrictions would be enacted pursuant to San Buenaventura Municipal Code, Chapter 22.170 Water Conservation, Section 22.170.010, Water waste prohibited, and enforced pursuant to applicable code provisions.

Responses to a catastrophic interruption in water supply are part of the Emergency Response Plan (ERP) explained below in section 1.7.

1.3 Stages of Action to Respond to Water Shortages

The City has developed a five-stage contingency plan to reduce demand up to 50 percent during a severe or extended water shortage event involving both voluntary and mandatory stages.

A. Water Supply Conditions

The water supply conditions below are based on available water supply and will be used to initially consider if water shortage event restrictions shall be implemented. Other circumstances shall also be considered, including but not limited to the time of year, weather forecasts, river flow forecast, previous rainfall, temperature, past experience and economic feasibility, the volume of water available from Lake Casitas, volume available from groundwater wells, and quality of the water produced from each source.

B. Stages of water use restrictions

Each stage shall remain in effect until conditions indicate a more or less restrictive stage is necessary and action is taken by the City Council based on supply criteria. The City Council shall have authority to enact any stage and need not proceed in order through the stages.

(1) Enacting water use restrictions:

Stages 2-5 of the WSCP shall be enacted by declaring an emergency water restriction by the Ventura City Council that enacts this WSCP. Water supply conditions and goals for each restriction stage are outlined in Table 1.

(2) Modifying and ending water use restrictions:

For each month that customer water use restrictions are in effect under this Water Shortage Event Contingency Plan the City Manager shall report to the City Council on the status of the shortage and water use changes in the Ventura Water system, including a recommendation to maintain, decrease or end the water use restrictions.

C. Planning for additional water supply to meet future needs

The City currently has a monitoring program to provide roughly five years advance warning of the need for a supplemental water supply, whether the need results from decrease supply due to drought or other factor or for long term increase in demand. This process will give the City sufficient time to implement a supplemental water supply project, from the feasibility study phase to completion of construction and start up of the facility. This program includes a biennial report to the City Council of water supply conditions.

Response to reduced water supply

The triggers for a seeking supplemental water supply in response to a water shortage event (including drought conditions) should be considered together. These include the condition of

the Ventura River, Lake Casitas, the Fox Canyon GMA credits, and the groundwater basins,. A supplemental water supply project should begin if the five year projection shows a reduction of ten percent or more in water supply from all the sources combined, excluding reclaimed water.

Response to increase future demand

The water demand trigger is met when increased annual demand within five years is projected to exceed 90% of available supply. This demand-based trigger should be considered independently of the triggers based on reduced supply. Alternatives available for consideration by the City Council include seawater desalination, importing state water, increased use of reclaimed water and others based on the actual circumstances at that future time.

TABLE 1 - WATER RESTRICTION STAGES

FEASIBLE DELIVERABLE SUPPLY Supply is water quantity based on average of past 5 years production Subcommittee recommends: <u>Lesser of past 5 year average or 2 most recent years production.</u>	DEMAND Projection in most recent Comprehensive Water Resources Report (CWRR) accepted by the City Council.	DEMAND REDUCTION GOAL
Moderate Shortage	Demand is above feasible deliverable supply Stage 1: supply and demand reviewed every 90 days.	Stage 1: 10% - 20% Voluntary
Severe Shortage	Demand is 20, 30, 40% or more above feasible deliverable supply. Stage 2, 3, 4: supply and demand reviewed every 30 days	Stage 2: 20% Mandatory Stage 3: 30% Mandatory Stage 4: 40% Mandatory
Critical Shortage	Demand is 50% or more above feasible deliverable supply. Stage 5: supply reviewed every 7 days	Stage 5: 50% Mandatory

- Stage 1: Moderate Shortage. Water production 10% below lesser of most recent 2 year average and 5 year average. Voluntary reduction in consumption of 10% to 20% voluntary based on called for reduction level.
- Stage 2: Severe Shortage. Production 11-20% below lesser of most recent 2 year average and 5 year average. Mandatory reduction of 20%.
- Stage 3: Severe Shortage. Production 21-30% below lesser of most recent 2 year average and 5 year average. Mandatory reduction of 30%.
- Stage 4: Severe Shortage. Production 31-40% below lesser of most recent 2 year average and 5 year average. Mandatory reduction of 40%.
- Stage 5: Critical Shortage. Production more than 40% below lesser of most recent 2 year average and 5 year average. Mandatory reduction of 50%.

Reductions should not limit a customer's "baseline" allocation below the health & safety supply of 50-60 gallons per person per day.

1.4 Minimum Water Supply Available During Next Three Years

The primary factor in limiting the City's existing water supplies is drought. In evaluating a three year worst-case rainfall scenario, the City assumed that severe drought conditions affecting supply of surface and groundwater sources would begin immediately and continue for three consecutive years (Table 2).

Available water sources reflecting capacity of current production facilities will be used as a "snapshot" of current conditions based on Table 4.2 of the 2014 Comprehensive Water Resources Report and corresponding tables in subsequent CWRR. These quantities must be evaluated each year and updated to reflect changing conditions, legal or regulatory changes, and system improvements.

As noted above in section 1.1B, water demand reported in the 2014 Comprehensive Water Resources Report was 17,343 Acre-Feet per Year (AFY).

Available water supplies during the three year period were projected considering:

- 1) the current status of each existing source and
- 2) the past response of each existing source to similar drought conditions.

Also, because of the complexities of the City's water sources, the specific numbers are only approximations.

**TABLE 2
ESTIMATE OF MINIMUM SUPPLY FOR THE NEXT THREE YEARS**

Source	Supply (AF)		
	2015	2016	2017
Casitas Municipal Water District	4,600	4,600	4,600
Ventura River (Foster Park)	0-2,000	0-2,000	0-2,000
Mound Basin	4,000	4,000	4,000
Oxnard Plain Basin	3,918	3,918	3,918
Santa Paula Basin	1,606	1,606	1,606
Recycled Water	700	700	700
	14,824-	14,824-	14,824-
Total Supplies	16,824	16,824	16,824

Notes: None of these numbers preclude the City's water rights. Supply quantities are based on Table 4-2 Summary of Projected Future Water Supply from Existing Sources, from the City's 2014 Comprehensive Water Resources Report, May 1, 2014.

ABOVE TABLE REVISED BY CITY STAFF 11/13/14

1.5 Prohibitions, Penalties, and Consumption Reduction Methods

At each of the stages of action within the Water Shortage Contingency Plan shown in Table 1, Ventura Water and its customers each have certain actions they must undertake.

- (1) Ventura Water actions involve increasing public awareness and education, adopting ordinances prohibiting water waste and establishing mandatory water conservation regulations, and periodically reviewing triggering events and stages.
- (2) Water customer actions involve implementing water conservation measures and complying with water conservation ordinances.

A. Calculations of Allocation to implement mandatory reduction in water use

Customer allocations will be based on the most recent average Spring consumption (usage during April, May and June). The final allocation will be set at a percent reduction corresponding to the demand reduction goal imposed.

No residential customer will have their allocation reduced below 50-60 gallons per person per day, a level supporting only inside (non-irrigation) uses. This amount is approximately 2 HCF per person per month. An appeal process shall be established for customer accounts where the number of residents has changed since the prior year.

Commercial, industrial and institutional customers including public agencies are subject to allocation reductions. Individual allocation reductions may be adjusted to no less than 10% cutback based on conclusions of feasible reductions documented in an individual water audit by Ventura Water staff.

B. Surcharge

Customers that exceed their usage allocation will be charged a surcharge based on water used over their allocation. The amount of the surcharge will be based on revenue loss and costs associated with running a mandatory conservation program, less the amount of savings from not producing and delivering the water during the mandatory reduction period. Therefore, the surcharge amount will differ for each reduction stage. The surcharge will be placed on the customer's water bill.

In addition, a usage-based charge may be implemented to further encourage conservation, with no additional charge for the first billing tier.

C. Efficiency Tracking

It will be necessary to calculate if water conservation actions are meeting the desired reduction goal. To determine this Ventura Water staff will compare billing for each customer class to determine if target reduction goals are being met. If goals are not being met, it may be necessary to go to the next reduction stage to attain the necessary cutbacks needed.

D. Mechanism to Determine Reductions in Water Use

Certain aspects of water conservation can be readily monitored and evaluated, such as metered water use and production quantities. Other aspects such as public education are more difficult to measure in terms of effectiveness. Additionally, weather patterns make it more difficult to compare one year's results with another.

When severe shortages occur and some degree of rationing is required, a program's effectiveness can be judged directly by water billings. In these cases, targeted results must be met and even reluctant customers will, on the whole, meet the goals. Specific methods to evaluate effectiveness of water conservation programs to be employed by the City are:

- Monitoring of Metered Water Usage – This will determine how much has been used. Compiling annual statistics to track usage of customer groups to determine trends is currently being done through the EnQuesta water billing computer system. Meter readings/billings can be compared and analyzed to determine the effectiveness of conservation for all customer classes.
- Monitoring Production Quantities – In normal water supply conditions, production figures are recorded daily by automation in the City's HACH Software System. The Water Production Supervisor and the Production Leadworker monitor the accuracy of the monthly production totals. The totals are incorporated into the monthly water supply report to the State Department of Health Services by the Water Treatment Supervisor.
 - Transition current customer water meters to "smart meters" to allow timely monitoring by customers of water use patterns. Program should be implemented in manner that avoids sudden increases to customers for meter upgrades.

- Provide incentives to owners of single-meter multi-family residential buildings to convert to individual meters for each dwelling.

To verify that conservation reduction goals are being met, production and metered usage reports will be provided to the Ventura Water General Manager and Water Utility Manager during each stage of the conservation period. Water production figures will be compared to previous year production figures for the same time period to ascertain if conservation goals are being reached.

E. Actions on Behalf of the City

The City shall use best efforts to comply with the restrictions similar to those implemented for the public to the extent possible and not inconsistent with the restrictions provided for City in this section. City will work all water customers to cooperate with the water restrictions imposed by this stage or other stages.

The watering of newly planted street, park and/or golf course trees, street medians, and general irrigation, all on City property, should be limited. Non-potable water from wastewater treatment shall be used by City personnel if available for such purposes.

In stage 2 or 3 mandatory restrictions, ornamental fountains and waterfalls shall not be replenished unless connected to recycled water.

City parks have three priorities for watering during a shortage:

- 1) No or little reduction in watering of sports fields that need turf for safety issues,
- 2) 20-30% reduction in watering for visitor areas of the City that need to look welcoming to visitors and
- 3) 30-40% reduction in passive use areas, these are the areas that will turn brown first.

The City Manager shall review city operations to identify possible water use reductions with the goal of matching allocation reductions imposed on residential customers.

Develop means to distribute reclaimed water to interested users for landscape and other non-potable uses.

Upon declaration of Stage 3 water shortage event Ventura Water will contact agencies to determine process to create emergency intertie to state project water via City of Oxnard should shortage conditions increase to become health or safety threat to Ventura Water customers.

During Stage 4 or 5, the decision to fill or refill the City swimming pools or continued operation of said pools shall be approved by the City Council with input from the Ventura Water General Manager or designees following written notice to all contracted user groups of the city pools in a manner that is safe and expeditious separate from the restrictions in the WSCP.

Hydrant flushing maintenance program shall be limited except as deemed necessary by the Ventura Water General Manager or designees to enhance water quality, fire flow tests, and large meter tests. Jet flushing of sanitary sewers, storm sewer flushing, and street sweeping shall be limited except as deemed necessary for health, safety, sanitation, or general welfare purposes.

1.6 City and Customer Action Plan

There are actions that the City and Water Customers will be responsible to undertake at each stage to attain demand reduction goals. These measures of the five stages of the City's Water Shortage Contingency Plan include:

A. Stage 1: 0-20 Percent Reduction Goal (Voluntary)

City Actions

1. Monitor conservation levels and increase public awareness.
2. Notify customers of shortage conditions and disseminate literature.
3. Publish customer use goals.
4. Identify Water Shortage Contingency Plan stages and the possible actions per stage.
5. Distribute water conservation brochures, information.
6. Distribute water conservation kits.
7. Request voluntary water consumption reduction.
8. Maintain existing tiered rate structure to promote water conservation.
9. Enforce water waste ordinance.
10. Inform new development applications of water restrictions.
11. Encourage landscape changes to use less irrigation

Water Customer Actions

1. Monitor own meter for usage.
2. Implement conservation measures to reduce usage.
3. Comply with water waste ordinance.

B. Stage 2: 20 Percent Reduction Goal (Mandatory)

City Actions (In addition to actions established in previous Stage)

1. Prepare a resolution for City Council approval initiating the appropriate mandatory conservation stage addressed in the City's Municipal Code
2. Enforce mandatory water consumption goals and allocations for all customers.
3. Enact water rate surcharge for water consumption over the customer's allocation.
4. Enact surcharge review program, customers may appeal in writing for a waiver of penalties incurred due to a leak or break or hardship.
5. Give incentive for landscape changes to use less irrigation.

6. Where feasible, use non-potable water to perform dust control, irrigate street landscaping, parks, and other areas.
7. Stop accepting new development applications or require "hold harmless" from applicant.

Water Customer Actions (In addition to actions established in previous Stage)

1. Comply with mandatory water conservation regulations.
2. Do not allow water to run and be wasted during outdoor use. (Adjust or reduce your sprinklers so the water does not run off the grass and onto the pavement or street.)
3. Do not allow leaks to persist past 48 hours.
4. Do not use a handheld hose to wash a vehicle unless it has a shutoff nozzle.
5. Restaurant water service is by customer request only.
6. Do not operate fountains unless the water is recycled.
7. No washing of sidewalks, walkways, driveways, parking lots or any other hard-surfaced areas by hose or flooding, except as otherwise necessary to prevent or eliminate conditions dangerous to the public health and safety or for other legitimate necessity;
8. Do not knowingly waste water in any way.
9. Comply with prohibited outdoor irrigation of ornamental landscape or turf with potable water through an irrigation system between the hours of 9:00 am and 6:00 pm and limiting the use of irrigation systems to two days a week.

C. Stage 3: 30 Percent Reduction Goal (Mandatory)

City Actions (In addition to actions established in previous Stage)

1. Prepare a resolution for City Council approval initiating the appropriate mandatory conservation stage addressed in the City's Municipal Code
2. Enforce mandatory water consumption goals and allocations for all customers.
3. Limit street sweeping, other activities that consume potable water (OK with nonpotable water)
4. promote graywater use by education, incentives, other actions.
5. Suggested to change outdoor watering to specific days of the week at this stage to aid enforcement, using even-odd house numbering.
6. At Stage 3 implement free or low cost recycled water to consumers for irrigation and other non-potable uses, pick up on own using own containers.
7. Use recycled water on city parks and landscaping; use contract trucks, fire department equipment or whatever is available.
8. Provide incentives to single metered multi-family units to install individual meters.
9. Implement baseline/use appeal process for hardship cases.

Water Customer Actions (In addition to actions established in previous Stage)

1. Comply with mandatory water conservation regulations.

D. Stage 4: 40 Percent Reduction Goal (Mandatory)

City Actions (In addition to actions established in previous Stage)

1. Prepare a resolution for City Council approval initiating the appropriate mandatory conservation stage addressed in the City's Municipal Code
2. Enforce mandatory water consumption goals and allocations for all customers.

3. Service to Municipal Irrigation Interruptible Rate Customers will be limited to health and safety and the public welfare – park by park or 20% over all park reduction.
4. Stop processing incomplete development applications and require "hold harmless" from applicant.

Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation regulations.

E. Stage 5: 50 Percent Reduction Goal (Mandatory)

City Actions (In addition to actions established in previous Stage)

1. Prepare a resolution for City Council approval initiating the appropriate mandatory conservation stage addressed in the City's Municipal Code
2. Enforce mandatory water consumption goals and allocations for all customers.
3. No outdoor irrigation will be allowed.
4. All water use not required for health and safety is prohibited.
5. Suspend the issuance of new building permits other than those required to be processed by state law. Building permits for emergencies, public safety and water conservation may be exempted by the City Manager,

Water Customer Actions (In addition to actions established in previous Stage)

1. Comply with mandatory water conservation regulations.
2. Prohibition of all outside water use unless necessary for the preservation of health and safety and the public welfare.
3. Watering with hand-held five gallon maximum bucket, filled at exterior hose bib or interior faucet (not by hose) shall be allowed at any time. This will assist in preserving vegetable gardens or fruit trees.
4. Stage 3, 4 and 5: Outdoor use of bath water, dishwater, and laundry water for irrigation purposes is encouraged to the extent this practice is allowed under local health and safety regulations.
5. The filling or refilling of swimming and wading pools is prohibited.

The following priorities for use of available water, based on California Water Code Chapter 3 and community input were used in establishing consumption limits. In order of preference they are:

1. Health and Safety - interior residential use and firefighting.
2. Commercial, Industrial and Governmental Uses - maintain jobs and economic base.
3. Permanent Crops
4. Annual Crops.
5. Existing Landscaping - especially trees and shrubs.
6. New Demand - projects without permits when shortage declared.

In a disaster, prior notice of allotment may not be possible; notice will be provided by other means. Appeals shall be processed as set forth in the established Mandatory Water Conservation Regulations.

In addition to the prohibitions above, the City also has a water waste ordinance.

1.7 Catastrophic Interruption to water supply

A catastrophic interruption may lead to a proclamation of a water shortage and could be any event (either natural or man-made) that causes a water shortage severe enough to classify as a Stage 3-5 water supply shortage condition.

In order to prepare for catastrophic events, the City has prepared an Emergency Response Plan (ERP) in accordance with other state and federal regulations. The purpose of the ERP is to design actions necessary to minimize the impacts of supply interruptions due to catastrophic events.

The ERP includes the City of San Buenaventura water system's standardized response and recovery procedures to prevent, minimize, and mitigate injury and damage resulting from emergencies or disasters of man-made or natural origin such as an earthquake, extended power outage, fire, biological or chemical contamination, and explosion.

The plan takes into account the various aspects of the City's Water System Protection Program pertaining to potential malevolent threats or actual terrorism. The information contained in the ERP is intended to guide staff and inform other emergency responding agencies and includes plans, procedures, lists, and identification of equipment, emergency contacts, etc.

In addition, the City's 2011 Water Master Plan analyzed seven different operational outage scenarios and provides an analysis of system impacts as well as long-term system improvements required to mitigate these impacts.

1.8 ENFORCEMENT

Enforcement of these restrictions shall be in accordance with San Buenaventura Municipal Code, Chapter 22.170 Water Conservation, Section 22.170.010, Water waste prohibited. The provisions of the section apply to all persons using city water, both in and outside the city, and within the city water service areas. Sections 1.150.010 through 1.150.050 of the San Buenaventura Municipal Code shall only apply to water users within the City, while city water users outside the city shall be punishable as specifically provided in Section 1.150.030.

A. Water Waste Prohibition

Prohibited actions and penalties for violating the Water Waste Ordinance are specified in the Municipal Code.

B. Mandatory Water Regulations

The Ventura City Council may choose to take actions through ordinance and resolution that establish mandatory water regulations that may include enforcement actions such as those previously implemented which includes:

- (a) A customer who does not meet the mandatory cutback shall pay a surcharge;

(b) If a customer continues to exceed the mandatory cutback after three consecutive billing periods, the City may install flow restrictors, at the customer's expense, in the City's meter service connection which reduces water flow and pressure.

The Ventura Water General Manager, with the approval of the City Manager, may prescribe rules and regulations for the implementation of ordinance provisions.

1.9 CITY REVENUE IMPACTS OF REDUCED SALES

Consumption reduction will impact revenues by decreasing the amount of water sold to customers. Water shortages may also impact construction activities. A reduction in construction activities will reduce fees collected by the City such as water service connection fees.

As consumption decreases, some expenditures are expected to increase. Staff costs for community education, enforcement of ordinances, monitoring and evaluation of water use, drought planning, and dealing with customer questions and complaints are expected to rise. Operations and maintenance costs may also increase because of the need to identify and quickly repair all water losses. A shift to alternative sources would change pumping, purchase, and treatment costs as different water supplies incur different purchase, treatment, and distribution costs. A summary of impacts to revenues is provided in Table 2, current data is available only for January to March 2014, with the previous year data used to develop the annual revenue shortfall.

**TABLE 3 >>>DRAFT SUBCOMMITTEE PROPOSED SIMPLIFIED TABLE<<<
REVENUE IMPACTS OF REDUCED WATER DEMAND**

Demand Reduction	Annual Revenue Reduction (\$ million)	% of \$28m water Operating Budget
10%	- \$2.7m	- 10%
20%	- \$5.3m	- 19%
30%	- \$7.9m	- 28%
40%	- \$10.4m	- 37%
50%	- \$12.8m	- 46%

Assumptions:

- Reductions are inside City customers only
- Reductions based on existing tiered rates only

A reduction in water revenue could be mitigated substantially through deferral or avoidance of capital fund expenditures. This would meet short-term cash flow needs, although it should only be considered on a short-term basis.

The water purchases, utility costs and chemical costs are *not* a linear function of the water usage reduction. However, in order to provide an estimate of the cost savings, it is assumed that if there is a ten percent reduction in usage, there will also be a ten percent reduction in associated costs. It should also be noted that if the mandatory reductions are required from December through April the wastewater revenue will be impacted for the following fiscal year.

A summary of measures to overcome revenue and expenditure impacts is provided in Table 4.

[NOTE: former Table 4 was deleted]

**TABLE 4
MEASURES TO OVERCOME REVENUE IMPACTS DURING SHORTAGE**

Measure	Summary of Effects
Use of Reserve Funds	Use of reserves may provide short-term rate stabilization, but would require delays in capital expenditures and rebuilding of reserves after the water shortage.
Decrease Capital Expenditures	Delay major construction projects for facilities as well as upgrades and replacements.
Shift Water Sources to Less Costly Supplies Possible	Reduce costs associated with purchase, treatment, and distribution of water.
Rate Increases	Increase revenue.

It should be noted that expenditure impacts could be reduced 2-10% during mandatory conservation efforts less than 50% because of the reduction in costs associated with the treatment and deliver of potable water. We will use the water rate model to predict the savings for the 10-50% water reductions. Rate adjustments could also be employed either solely or in conjunction with capital expenditure reductions.

-- end --

Agenda Item Number 7
Task Force Meeting Date Change
and Addition
November 19, 2014

No written report for this Item