



*City of Arts & Innovation*

# City Council Memorandum

**TO: HONORABLE MAYOR AND CITY COUNCIL** **DATE: JUNE 6, 2017**  
**FROM: PUBLIC UTILITIES** **WARDS: ALL**  
**SUBJECT: WATER CONSERVATION SURCHARGE UPDATE**

## **ISSUE:**

Receive a triennial report on the disbursement of revenue collected pursuant to the Water Conservation Surcharge.

## **RECOMMENDATION:**

That the City Council receive a triennial report on the disbursement of revenue collected pursuant to the Water Conservation Surcharge.

## **BOARD RECOMMENDATION:**

On April 24, 2017 the Board of Public Utilities unanimously voted to receive this report.

## **LEGISLATIVE HISTORY:**

Senate Bill (SB) x7-7 (2009) requires the State of California to achieve a 20% reduction in urban per capita water use by December 31, 2020. The State is required to make incremental progress towards this goal by reducing per capita water use by at least 10% on or before December 31, 2015. RPU is currently surpassing this goal.

## **BACKGROUND:**

On May 25, 2004, the City Council adopted the ten-year Water Conservation Surcharge (WCS) to serve the growing need for water conservation in the City of Riverside. The WCS is a 1.5% charge on all water sales for all customers which include both residential and commercial customers. The surcharge is listed as an individual line item on the monthly utility bill and is to be used for conservation, education and water use efficiency programs. The average residential Riverside Public Utilities (RPU) customer pays \$0.56 per month for this surcharge and the average commercial customer pays \$3.17 per month. Collectively, the surcharge generates \$750,000 – \$950,000 on an annual basis. The WCS is utilized for:

1. Conservation, education, and water use efficiency programs:
  - a. Turf Removal

- b. Water Saving Devices
  - c. Direct Installation Programs of water efficiency measures
2. Research, development, and demonstration programs to advance science and technology on water conservation.

As the Water Conservation Surcharge Fund was phased in from 2004-2006, it took several years before RPU accumulated sufficient funding to begin effective water conservation programming. Although many conservation activities have been undertaken since the 1990s, water conservation programming began in earnest in 2007. In November 2009 the Governor and State Legislature approved Senate Bill (SB) x7-7 mandating urban water suppliers to lower per capita water usage 20% by the year 2020. In response to this legislation, RPU used the WCS Fund to increase offerings of water conservation programs to its customers, implement direct installation programs, increase marketing, education and promotional efforts, and created grants and research funding opportunities for local universities.

On April 22, 2014 City Council approved a ten-year extension of the Water Conservation Surcharge applicable to all RPU water customers. Additionally, the City Council requested that staff provide a triennial report on the disbursement of revenue collected pursuant to the Water Conservation Surcharge.

## **DISCUSSION:**

### **REVENUE**

Since the approved extension of the WCS in 2014, the fund has experienced a 19% contraction in annual revenue. This drop in revenue is primarily due to the drought experienced throughout the State and the conservation efforts of RPU and the positive response of RPU's customers. The table below summarizes the revenues received by the WCS Fund:

<b>WCS Fund Revenue</b>	<b>FY 13/14</b>	<b>FY 14/15</b>	<b>FY 15/16</b>
WCS Revenue	\$984,695	\$888,373	\$800,896
Outside Agency	\$62,150	\$3,531,557	\$487,614
Rate Revenue	\$0	\$1,000,000	\$750,000
<i>Total Revenues</i>	<i>\$1,046,845</i>	<i>\$5,419,930</i>	<i>\$2,038,510</i>

The WCS is utilized by RPU's Customer Relations Division to facilitate water conservation efforts. Although the total revenues have increased over the past three years due to outside funding sources, the WCS revenue has been declining due to the decrease in water consumption.

In an effort to maximize the availability of water conservation programs and services, RPU works with Western Municipal Water District (WMWD) to apply for funding from outside agencies. During Fiscal Year 2014/15, RPU applied for and received over \$3.5 million to facilitate turf removal programs within the City. Additionally, RPU applied for and received a \$300,000 grant from the Santa Ana Watershed Project Authority (SAWPA) in Fiscal Year 2015/16. These funds were allocated to RPU's water conservation programs. In addition to the outside funding received, RPU transferred \$1 million during Fiscal Year 2014/15 from the Rate Revenue Water Fund Balance into the WCS Fund to support turf removal efforts and transferred an additional \$750,000 in Fiscal Year 2015/16 from the Rate Revenue Water Fund Balance into the WCS Fund.

## EXPENDITURES

<b>WCS Fund Expenditures</b>	<b>FY 13/14</b>	<b>FY 14/15</b>	<b>FY 15/16</b>
WCS Programs	\$471,428	\$5,068,628	\$1,580,118
Personnel	\$172,099	\$208,923	\$196,713
Non-personnel	\$47,962	\$79,741	\$132,375
<i>Total Expenditures</i>	<i>\$691,489</i>	<i>\$5,357,292</i>	<i>\$1,909,206</i>

Approved by the Board of Public Utilities on August 22, 2016, a demonstration garden located at the Janet Goeske Center (Center) is currently under construction and is being funded by the WCS. During the planning of this project RPU was able to leverage its relationship with The Toro Company to create a public-private partnership which will allow RPU customers to learn what alternatives are available when considering a turf removal project and learn irrigation installation methods and watering best practices. Through the partnership with the Center, RPU customers will enjoy educational opportunities offered at the Center such as irrigation methodology classes and water efficient gardening practices.

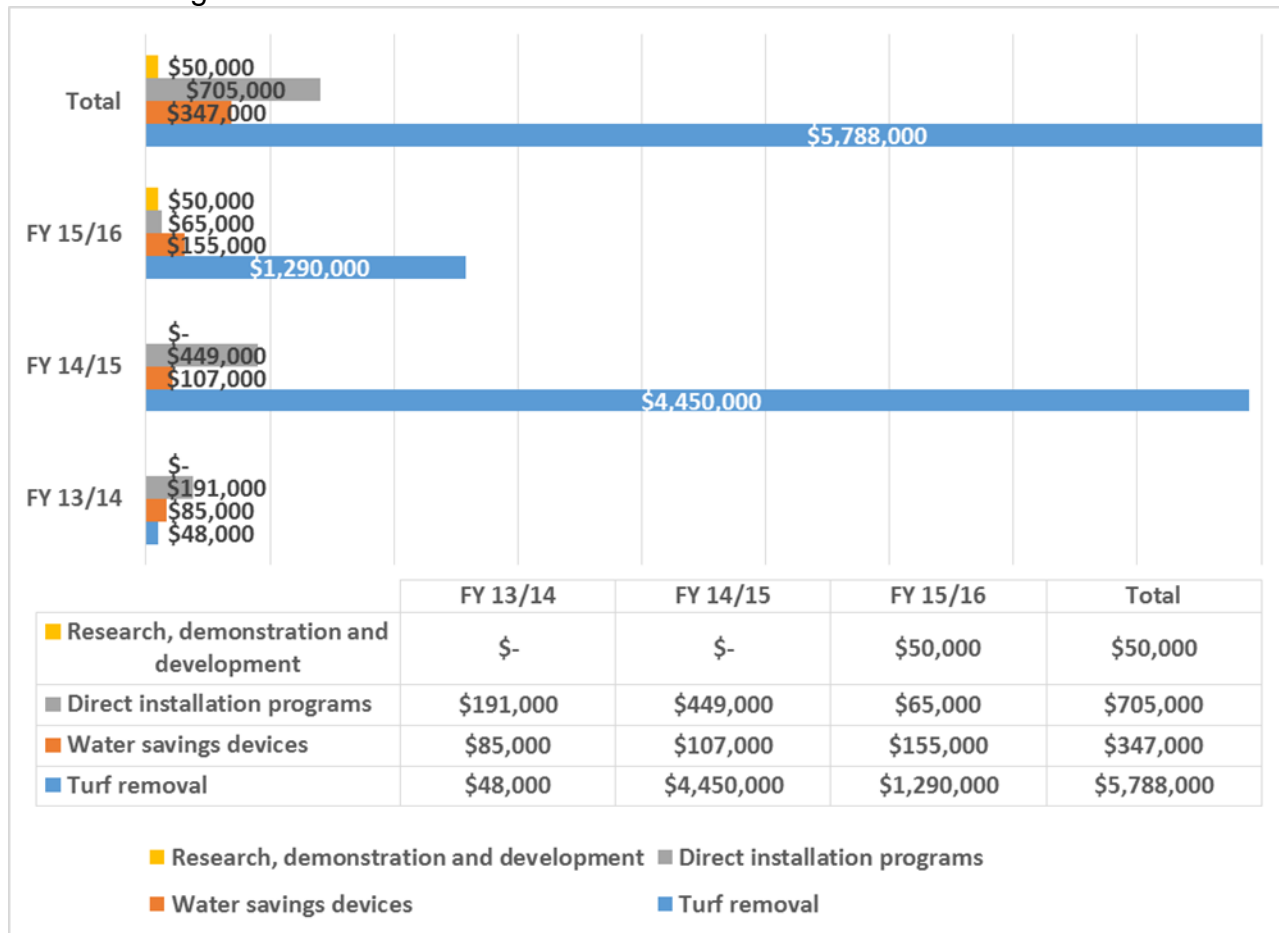
The Center will also create a docent program by which senior citizens will receive training to lead tours of the garden and answer questions that may arise from a visit to the garden.

The WCS also funds two full-time employees within the Customer Relations Division who are responsible for managing RPU's water conservation programs. The water conservation staff supports customer relations with both residential and commercial customers by responding to high bill complaints and offering technical assistance when appropriate.

Staff also recommends and administers RPU's water conservation rebates as a primary function of their role. Additionally, staff manages direct installation vendors and is tasked with administering these contracts. The water conservation staff regularly attends community events and makes presentations to local groups who are interested in using water more efficiently. The WCS also helps fund water conservation education in local elementary schools by funding an RPU licensed and credentialed teacher. Finally, staff acts as a liaison between RPU and other local agencies such as the WMWD, Metropolitan Water District, and Santa Ana Watershed Project Authority. .

Non-personal expenditures include items such as advertising, outside printing, software licensing for the web-based turf removal program tool and training. These non-personnel expenditures help RPU provide excellent customer service and allow staff to function as subject matter experts for local water conservation best practice methodologies.

## WCS Funding Disbursement for FY 2013/14 – 2015/16



## WATER CONSERVATION PROGRAMS AND EFFECTIVENESS

When water conservation programming began in 2007, RPU only offered minimal rebate opportunities for its customers who wanted to save water. Since then, RPU has worked closely with its customer base to provide rebate opportunities that were both desired by the community and benefited RPU's mandated reduction in per capita water usage. The 20% compliance target by 2020 was set at 213 gallons per capita per day, RPU is currently tracking below this target at 180 gallons per capita per day. RPU is currently surpassing the goal set forth in (SB) x7-7 but is now being tasked with aligning its water conservation efforts to the State Water Resources Control Board's new mandates. These new mandates are still under review but are expected to include items such as water conservation reporting and continuous state-mandated conservation targets.

In addition to assisting RPU meet its mandated reduction in per capita water usage, water conservation programs also improve our local water supply. RPU considers the water conserved through these efforts to be a resource. In furtherance of this philosophy, when new programs are developed and are evaluated, RPU looks at the avoided cost of purchasing water through Metropolitan Water District (MWD) as the benchmark resource cost. The purchase of imported water from MWD in 2017 would cost RPU approximately \$1,000 per acre foot. RPU will typically pursue programs if the cost per acre foot saved is less than the cost of purchasing imported water.

## 1. Turf Removal

The Waterwise Landscape Program encourages RPU customers to reduce their outdoor water consumption by removing their turf grass and replacing it with native or low water use plants and high-efficiency drip irrigation. The “More Color, Less Water” approach has reduced outdoor water consumption as well as promoted a variety of aesthetic approaches for turf replacement. RPU began offering its turf removal program in 2008. Although the Turf Removal Program has produced significant water savings, it is RPU’s most expensive water conservation measure and was supplemented in Fiscal Year 2014-15, during the drought, with outside agency funding that is no longer available. Turf removal should not be relied upon as the backbone of RPU’s water conservation efforts, but does help support RPU’s overall water conservation portfolio and demonstrates the importance of efficient outdoor water use. During the last three years of this program, 643 RPU customers have saved nearly 113 million gallons of water, at an average resource cost of \$1,238 per acre-foot saved for the lifetime of the measure.

The Artificial Turf Program encouraged water conservation practices by incentivizing RPU water customers who elected to remove their turf grass and replace it with artificial turf. This program was offered through the Fiscal Year 2014-15, but due to the potential environmental impacts, it was not funded for Fiscal Year 2015-16 at the request of the Board of Public Utilities and City Council.

### Three Year Turf Removal Program Statistics

	# of Rebates	\$ Rebates	Gallons Saved	Acre Feet Saved	\$ per Acre Foot	\$ per Acre Foot (life)
2013/14	57	\$48,134.00	3,896,130	12	\$4,025.66	\$ 402.57
2014/15	452	\$4,459,447.00	80,209,038	246	\$18,116.60	\$ 1,811.66
2015/16	134	\$1,292,980.00	28,087,038	86	\$15,000.47	\$ 1,500.05
Total	643	\$5,800,561.00	112,192,206	344	\$12,380 (avg.)	\$1,238 (avg.)

## 2. Water Saving Devices

RPU provides incentives to its water customers who install qualifying water measures. These programs include High-Efficiency Toilets, High-Efficiency Clothes Washers, Weather Based Irrigation Controllers, High-Efficiency Nozzles and FreeSprinklerNozzles.com. Over the last three years, 3,647 RPU customers have saved over 85 million gallons of water by participating in these programs, producing an average resource cost of \$206 per acre-foot saved for the lifetime of the measures.

### Three Year Water Saving Devices Program Statistics

	# of Rebates	\$ Rebates	Gallons Saved	Acre Feet Saved	\$ per Acre Foot	\$ per Acre Foot (life)
2013/14	1,082	\$84,997.00	38,350,663	118	\$722.19	\$ 103.17
2014/15	1,462	\$106,822.00	23,763,661	73	\$1,464.76	\$ 209.25
2015/16	1,103	\$155,821.00	23,668,642	73	\$2,145.22	\$ 306.46
Total	3,647	\$347,640.00	85,782,966	263	\$1,444 (avg.)	\$206 (avg.)

### 3. Direct Installation of Water Efficiency Measures

RPU created two direct installation programs to encourage conservation among hard to reach high use water customers. RPU is a member agency of WMWD and has partnered with WMWD to conduct two direct installation programs: High-Efficiency Toilets and High-Efficiency Urinal Flush Valves. These programs were directed towards RPU customers who had high indoor water consumption.

Since 2011, RPU has offered its Smart Irrigation Program (SIP) to both residential and commercial customers. SIP was developed to target customers who have large outdoor water consumption. Customers who participate in SIP receive Weather Based Irrigation Controllers and High-Efficiency Toro Precision Series Nozzles.

Over the last three years, 1,811 RPU customers have saved nearly 28 million gallons of water by participating in these programs, producing an average resource cost of \$843 per acre-foot saved for the lifetime of the measures.

#### Three Year Direct Installation Water Efficiency Measures Program Statistics

	# of Participar	\$ Rebates	Gallons Saved Saved	Acre Feet Saved	\$ per Acre Foot	\$ per Acre Foot (life)
2013/14	905	\$191,014.08	14,501,573	45	\$4,292.09	\$ 429.21
2014/15	751	\$448,684.98	10,214,052	31	\$14,314.05	\$ 1,431.40
2015/16	155	\$65,286.36	3,184,012	10	\$6,681.39	\$ 668.14
Total	1,811	\$704,985.42	27,899,637	86	\$8,429 (avg.)	\$843 (avg.)

### 4. Research Demonstration and Development

The Water Innovations Grant Program provides support to local universities to develop water conservation techniques and procedures. Applicants may propose an original, innovative solution to a significant water issue and provide a clear potential benefit to California water ratepayers in one of these target areas: landscape water use efficiency, indoor water use efficiency, industrial process efficiency, water reclamation and re-use, water use-related environmental research or strategic water research. During this reporting period, RPU has awarded one Water Innovations Grant in the amount of \$50,000 to the University of California Riverside.

#### WATER CONSERVATION SURCHARGE – DROUGHT RESPONSE

RPU has offered water conservation programs and rebates for nearly 14 years. As a result, RPU was well positioned to meet the challenges presented by the drought by merely adjusting incentive levels and promoting existing programs. Unlike many other water districts throughout the state, RPU already had a robust water conservation rebate portfolio at its disposal. This forward thinking approach allowed RPU to increase the amount of water saved, from 948 acre-feet in 2013 to 3,390 acre-feet in 2015. This 198% increase in water savings helped RPU avoid any state issued punitive fees and allowed RPU to remain water independent during the historic drought.

The State is now considering new regulatory requirements for water purveyors across the state. The next generation of water efficiency and conservation outlined in Executive Order B-37-16 will fulfill the first directive of the California Water Action Plan, to “Make Conservation a California Way of Life.” Improved water efficiency will also support the State’s ambitious climate change goals by

reducing energy use and greenhouse gas emissions associated with water production and transportation, and by building resilience to future droughts.

The Executive Order contains four interrelated objectives:

1. Using water more efficiently;
2. Eliminating water waste;
3. Strengthening local drought resilience; and
4. Improving agricultural water use efficiency and drought planning.

To accomplish these tasks, RPU will be required to report the amount of conservation achieved, as well as any enforcement efforts. The rulemaking began in late 2016 and will run through 2017. RPU will also continue to develop and manage water conservation programs that both assist RPU to meet future demands as well as ensure compliance with any new legislative actions. The WCS will play a vital role when it comes to RPU's efforts to meet new efficiency standards as well as meet the future supply demands of Riverside as the city continues to grow.

### **FISCAL IMPACT:**

There is no fiscal impact associated with the receipt of this report.

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Approved by:	John A. Russo, City Manager
Approved as to form:	Gary G. Geuss, City Attorney

Attachment:                      Presentation