



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: APRIL 24, 2017

ITEM NO: 10

SUBJECT: WATER CONSERVATION SURCHARGE UPDATE

ISSUES:

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

RECOMMENDATION:

That the Board of Public Utilities receive and file this report.

LEGISLATIVE HISTORY:

Senate Bill (SB) x7 -7 (2009) requires the State to achieve a 20% reduction in urban per capita water use in California 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. Riverside Public Utilities (RPU) is currently surpassing this goal.

BACKGROUND:

On May 25, 2004, the City Council adopted the ten-year Water Conservation Surcharge to serve the growing need for water conservation in the City of Riverside. The Water Conservation Surcharge is a 1.5% charge on all water sales for 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. Collectively, the surcharge represents \$750,000 – \$950,000 for the fund annually. The Water Conservation Surcharge 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 Water Conservation Surcharge fund to increase offerings of water conservation programs to its customers, implement direct installation programs, increase marketing, education and promotion efforts, and create 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, 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 Water Conservation Surcharge in 2014, the fund has experienced a 19% contraction in revenue received from the charge. This drop in revenue is primarily due to the drought experienced throughout the State of California and the conservation efforts of RPU and the positive response of RPU's customers. The table below summarizes the revenues received by the Water Conservation Surcharge Fund:

WCS Fund Revenue	FY 13/14	FY 14/15	FY 15/16
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 Water Conservation Surcharge 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 Water Conservation Surcharge 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 of Riverside. 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 Water Conservation Surcharge Fund to support turf removal efforts.

EXPENDITURES:

WCS Fund Expenditures	FY 13/14	FY 14/15	FY 15/16
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>

The primary function of the Water Conservation Surcharge is to allow RPU to develop and administer water conservation programs and rebates. RPU utilizes the Water Conservation Surcharge to fund turf removal programs, offer rebates on water saving devices, fund and administer water saving direct installation programs, and to offer water innovation grants.

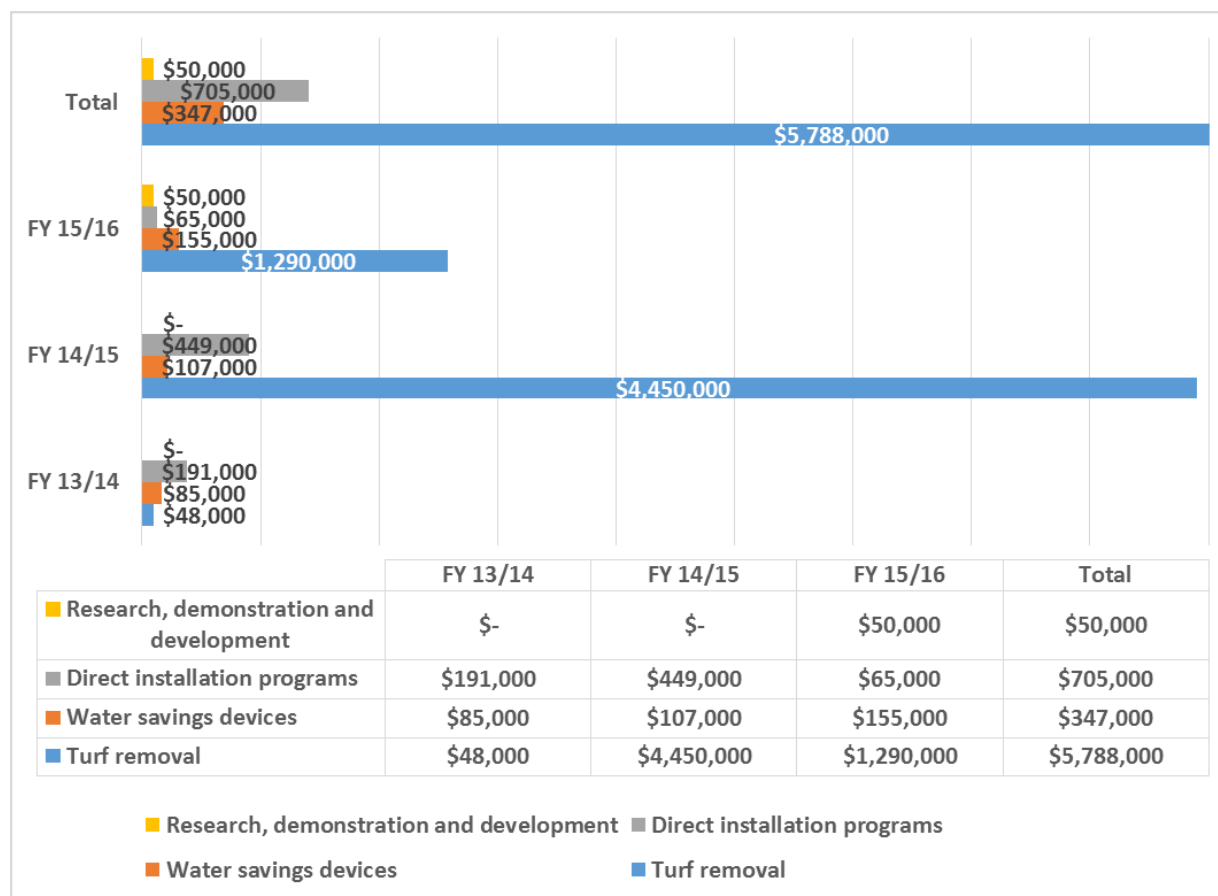
The demonstration garden located at the Goeske Senior Center approved by the Board of Public Utilities on August 22, 2016, is currently under construction and is being funded by the Water Conservation Surcharge. During the planning of this project, RPU was able to leverage its relationship with The Toro

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 will allow RPU customers to learn irrigation installation methods and watering best practices. Through the partnership with the Goeske Center, RPU customers will enjoy educational opportunities at the garden such as irrigation methodology classes and water efficient gardening practices. The Goeske Center will also create a docent program by which senior citizens will be trained to lead tours of the garden and answer questions that may arise from a visit to the garden.

The Water Conservation Surcharge also funds two full-time employees within the Customer Relations Division who are responsible for managing RPU's water conservation efforts. 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 for local groups who are interested in using water more efficiently. The Water Conservation Surcharge also helps fund water conservation education in the local elementary schools administered by a RPU licensed credentialed teacher on staff. Finally, staff acts as a liaison between RPU and other local agencies such as Western Municipal Water District, Metropolitan Water District, and Santa Ana Watershed Project Authority. These agencies are the sources of outside funding such as the \$3.5 million received during the drought to fund RPU's turf removal programs.

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 services and allow staff to function as subject matter experts for local water conservation best practice methodologies.

Water Conservation Surcharge 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 (SB) x7-7 mandated a reduction in usage of 20% by the year 2020. The 20% compliance target by 2020 was set at 213 gallons per capita per day, and 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 with 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. To position RPU to meet or exceed these legislative goals, RPU offers programs to assist RPU's customers to use water in an efficient manner. Details on the water use efficiency programs currently being offered by RPU are seen below.

In addition to assisting RPU meet the (SB) x7-7 mandated a reduction goal, the water conservation programs are developed to improve our local water supply. RPU considers the water conserved through its conservation efforts to be a resource. Due to this philosophy, when new programs are being developed or 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 costs RPU approximately \$1,000 per acre foot. RPU will typically pursue programs if the cost per acre foot saved is less than 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 the outdoor water consumption of RPU customers as well as promoted a variety of aesthetic approaches for turf replacement. As a leader in the Southern California, 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 the 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 1.2 billion gallons of water by their participation at an average resource cost of \$117 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 RPU Board 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	41,632,932	128	\$376.73	\$ 37.67
2014/15	452	\$4,459,447.00	857,090,863	2,630	\$1,695.40	\$ 169.54
2015/16	134	\$1,292,980.00	292,640,938	898	\$1,439.71	\$ 143.97
Total	643	\$5,800,561.00	1,191,364,733	3,656	\$1,170 (avg.)	\$117 (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. During the past three years of these programs, 3,647 RPU customers have saved 508,665,000 gallons of water by their participation at an average resource cost of \$31 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	148,383,004	455	\$186.65	\$ 26.66
2014/15	1,462	\$106,822.00	173,848,477	534	\$200.22	\$ 28.60
2015/16	1,103	\$155,821.00	186,433,540	572	\$272.35	\$ 38.91
Total	3,647	\$347,640.00	508,665,021	1,561	\$219 (avg.)	\$31 (avg.)

3. Direct Installation of Water Efficiency Measures

RPU created two direct installation programs to encourage hard to reach high use water customers to reduce their consumption. RPU is a member of WMWD and partnered with them 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 such as student housing for the local universities.

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.

During the last three years of these programs, 1,811 RPU customers have saved 211,590,000 gallons of water by their participation at an average resource cost of \$122 per acre-foot saved for the lifetime of the measures.

Three Year Direct Installation Water Efficiency Measures Program Statistics

	# of Participants	\$ Rebates	Gallons Saved	Acre Feet Saved	\$ per Acre Foot	\$ per Acre Foot (life)
2013/14	905	\$191,014.08	118,852,749	365	\$523.69	\$ 52.37
2014/15	751	\$448,684.98	75,190,830	231	\$1,944.45	\$ 194.44
2015/16	155	\$65,286.36	17,466,174	54	\$1,217.99	\$ 121.80
Total	1,811	\$704,985.42	211,509,753	649	\$1,228 (avg.)	\$122 (avg.)

4. Research Demonstration and Development

The Water Innovations Grant Program provides support for local universities as they make advancements in 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.

WATER CONSERVATION SURCHARGE – DROUGHT RESPONSE

Since the inception of the Water Conservation Surcharge in 2004, RPU has offered water conservation programs and rebates for nearly 14 years. As a result, RPU was positioned to meet the challenges presented by the drought by merely adjusting incentive levels and promoting existing programs. Unlike many water districts in the state, RPU already had a robust water conservation rebate portfolio at its disposal. This forward approach allowed RPU to increase the acre-feet saved from 948 in 2013 to 3,390 in 2015. This 258% increase in water savings assisted in helping RPU avoid any state issued punitive fees and helped RPU to remain water independent during the historic drought.

Due to 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/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
4. Improving agricultural water use efficiency and drought planning

To accomplish these tasks, RPU will be required to begin reporting the amount of conservation achieved, and any enforcement efforts. The rulemaking began at the end of 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 Water Conservation Surcharge 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 with the receipt of this update.

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Certifies availability

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Attachments:

1. Presentation
2. Funding for Turf Removal
3. SAWPA Funding
4. Goeske RFP