



DATE: September 19, 2017

TO: Mayor and City Council

FROM: Director of Utilities & Environmental Services

SUBJECT Pay As You Save (PAYS) Program Modification

RECOMMENDATION

That City Council adopts the attached resolution to modify the program to add additional flexibility to the duration of the PAYS® pilot program repayment terms.

SUMMARY

The Green Hayward PAYS® (Pay-As-You-Save) Pilot Program launched in September of 2015. The program allows multifamily property owners to install water and energy efficiency upgrades and repay the cost through a surcharge on their water bills. After two years of implementation, program participation has been well below what had been projected. Staff reached out to prospective customers to better understand barriers to participation. Based on customer input, staff is recommending adding additional flexibility to the duration of the PAYS® repayment terms.

Currently, PAYS® customers repay the cost of the property upgrades over ten years. Staff is recommending allowing property owners to select a repayment period between three to ten years and allowing customers to prepay without penalty. The goal of this change is to save customers money by reducing the amount of interest they would pay over the life of their repayment. At its July meeting, the Council Sustainability Committee voted to recommend that the City Council adopt these changes.

BACKGROUND AND DISCUSSION

On February 18, 2014, Council [approved a resolution](#) authorizing the Green Hayward PAYS® On-Bill Conservation and Efficiency Financing Pilot Program. Because PAYS® could not secure private financing, on [June 23, 2015](#) Council allocated \$1,000,000 from the Water Improvement Capital Fund to cover the upfront costs associated with installing conservation and efficiency measures at multifamily properties. As currently approved, this money will be paid back over ten years through a surcharge on each participating customer's water bill. For more details about the PAYS® Program, including frequently asked questions, please visit www.Hayward-ca.gov/PAYS.

Program participation has so far been well below what had been projected. Based on input from prospective participants, on July 10, 2017, the Council Sustainability Committee [received a staff report](#) recommending adding additional flexibility to the duration of the PAYS® repayment terms. At that meeting, the Committee unanimously recommended that Council adopt the recommended flexibilities, as explained in this staff report.

Current Program Design

Following a competitive process, the City selected a preferred contractor, Bottom Line Utilities Solutions (BLUS), and suppliers to perform the installations and supply water conservation products on behalf of the City. In addition, the City selected a Certification Agent, BKi (now doing business as Frontier Energy, Inc.), to provide program administration and quality assurance. BLUS and Frontier conduct outreach to Hayward multifamily property owners and managers with assistance from the City. Once a customer expresses interest in the PAYS® program, BLUS does an assessment of the property and estimates water, sewer, and energy savings. Frontier checks BLUS's estimates and calculates the cost of the surcharge that will appear on the customer's bill, which must be less than 80% of the customer's estimated bill savings.

Customers can either select BLUS to complete the upgrades or select their own contractor, with the stipulation that their contractor cannot cost more than BLUS. Customers then repay program costs over ten years through a surcharge on their bi-monthly water bills. The goal is that the customer will realize an immediate net reduction in their bills. If a property were to change hands, the surcharge would stay with the property.

Program Participation

As of June 2017, two years past PAYS® authorization, only four properties have completed upgrades, totaling 138 units and using \$130,452 of the \$1,000,0000 dedicated to the program. In addition, eight properties are actively considering proposals they have received from PAYS® to perform updates, totaling 515 units and using \$221,222. These properties are summarized in the table on page three and their locations are shown on the map in Attachment III.

Completed Projects and Active PAYS® Proposals

	# of Units	Cost of PAYS® Upgrades	Surcharge/Bill	Projected Net Savings/Bill
Completed Projects				
1	34	\$9,100	\$211	\$329
2	24	\$12,261	\$285	\$230
3	12	\$6,483	\$151	\$434
4	68	\$102,608	\$2,382	\$17,440
Subtotal	138	\$130,452	\$3,029	\$18,309
Active Proposals				
5	102	\$53,311	\$1,238	\$5,044
6	33	\$14,694	\$341	\$773
7	45	\$20,001	\$464	\$1,069
8	30	\$8,898	\$207	\$201
9	8	\$3,174	\$74	\$76
10	41	\$20,422	\$474	\$819
11	68	\$31,370	\$728	\$2,449
12	188	\$69,352	\$1,610	\$7,317
Subtotal	515	\$221,222	\$5,136	\$17,748
TOTAL	653	\$351,675	\$8,165	\$36,057

In addition to the properties above, two multifamily properties totaling twenty-three units completed upgrades on their own due in part to the marketing efforts of the PAYS® Program. These properties received assessments from the PAYS® contractor and decided to complete the upgrades, but declined to use the on-bill financing.

Bill Analysis for Completed Projects

Staff conducted bill analyses for the first three completed projects, which is summarized in the table below. Staff does not have sufficient billing data yet to assess the performance of the fourth property's upgrades. Properties one and two have twelve months of billing data. Property three has seven months of billing data. Bills savings are calculated using an estimate of what the customer would have paid had they not completed the upgrades. This estimate is based on two years of historic billing data for the property.

For properties one and two, staff only looked at water bills because the owner was new and thus did not have access to two-years of historic PG&E bills. For property three, staff looked at water and energy bills.

As an example, property two installed twenty-four new toilets, thirteen showerheads, thirty-one aerators, and sixty-three in-unit LEDs in twenty-four units. In addition, they replaced sixty-three common area lighting fixtures and added a hot water demand controller and pipe insulation. The cost of the PAYS® upgrades was \$12,261. This amount will be paid back with interest over ten years through a bi-monthly surcharge of \$285. The projected net water savings (after subtracting the surcharge) for this property was \$230 per bill. The actual

average net water savings has been \$487 per bill (\$257 greater than projected). Actual savings are calculated by comparing consumption during a billing period to two years of historic water consumption during that same billing period. As stated above, staff was unable to calculate actual energy savings for this property because we did not have access to historic PG&E bills.

Completed Projects	Cost of PAYS® Upgrades	Surcharge /Bill	Projected Net Savings/Bill*	Average Actual Net Savings/Bill*	Surcharge as % of Bill Savings**
1	\$9,100	\$211	\$329	\$845	20%
2	\$12,261	\$285	\$230	\$487	37%
3	\$6,483	\$151	\$434	\$177	46%
TOTAL	\$27,844	\$647	\$993	\$1,509	

*Net savings is the total savings minus the cost of the surcharge

**Surcharge as % of Bill Savings is calculated by dividing the surcharge by the average actual full savings (net savings + surcharge); A lower number represents more net savings

Measures Installed	Property 1	Property 2	Property 3
Toilets	33	24	10
Showerheads	19	13	9
Bathroom Aerators	24	12	9
Kitchen Aerators	21	19	9
Hot Water Demand Controller	0	1	1
Hot Water Pipe Insulation	0	1	1
Common Area Lighting	22	63	40
In-Unit LEDs	48	63	36

Staff's conclusions from the above data:

1. All three of the properties are saving money and were well below the "80%" threshold. In other words, only 20%, 37%, and 46% of the savings realized by these customers went to pay their surcharges. The remaining savings went back to these customers.
2. The average net bill savings (after subtracting the surcharge) realized by these customers ranged from \$177 to \$845. In contrast, the average bill savings for the two properties who completed the toilet upgrades on their own were \$136 and \$279.
3. The first two properties have achieved actual bill savings higher than their projected bill savings. The projected savings were calculated with very conservative estimates of existing measures with uniform characteristics.
4. The third property achieved lower actual savings than what BLUS had projected. This customer achieved reductions in their water usage, but the energy upgrades did not deliver expected savings based on misreported existing conditions. BKi and BLUS have updated their protocols to minimize this error for future properties.

Program Modifications to Address Low Participation

While the properties that have been completed are performing well thus far, the PAYS® program has had substantially less participation than projected. When the program launched in October 2015, the program partners projected that thirty-seven properties with 2,000 units would be completed in the first year. Two years after launch, only four properties have been completed.

Staff has identified a few barriers that may account for this slower rollout. Many of the larger property management companies have several layers of administration. This has delayed the signing of agreements and the onsite installations. In addition, some larger properties, including some owned by Eden Housing, have already updated their toilets. Finally, small to medium sized properties, which are more likely to need the financing, have expressed concern about the amount of interest they would be paying over ten years of financing. The current program design requires a payback period of ten years.

To address that last barrier, staff is recommending the following updates to the PAYS® program:

1. Allow flexible repayment terms from three to ten years, up to the point that the surcharge will be no more than 100% of savings for property owners (rather than 80%). Shorter repayment terms result in higher bi-monthly surcharges, but the property owner will end up saving more over the life of the repayment due to less interest (see example below).
2. Allow for prepayment without penalty.

Below is an example of a real property in Hayward with ten units. The City's PAYS® contractor gave this property owner a quote to do \$12,712 worth of upgrades on her property. She declined to participate in the program because she felt the ten-year payment term would result in her paying too much interest. If her payment term was shortened to five years, she would have saved \$2,586 in interest, per the table below. If she had been able to prepay without penalty, she could have further reduced the interest amount.

Number of Payments	Surcharge/Bill	Total Surcharge over 10 years	Total interest over 10 years	Estimated Net Savings/Bill*	Surcharge as % of Bill Savings**
Cost of Surcharge with 60 bi-monthly payments (10 years)					
60	\$295	\$17,708	\$4,996	\$239	55%
Cost of Surcharge with 30 bi-monthly payments (5 years)					
30	\$504	\$15,122	\$2,410	\$30	94%
Difference	\$209	-\$2,586	-\$2,586		

*Net savings is the total savings minus the cost of the surcharge

**Surcharge as % of Bill Savings is calculated by dividing the surcharge by the average actual full savings (net savings + surcharge); A lower number represents more net savings

ECONOMIC IMPACT

The Green Hayward PAYS® Program allows residents and property owners to improve energy and water efficiency in their homes with no up-front costs and no projected increases in their overall utility bills. Flexible repayment terms would decrease the total amount owed by customers, which would save them more money in the long term. In the short term, the customer's bi-monthly bills would be higher due to a higher surcharge amount.

STRATEGIC PRIORITIES

This agenda item supports the Complete Communities strategic initiative, with a purpose to create and support structures, services, and amenities to provide inclusive and equitable access with the goal of becoming a thriving and promising place to live, work and play for all. This item supports the following goal and objective:

Goal 1: Improve quality of life for residents, business owners, and community members in all Hayward neighborhoods

Objective 1.d: Create resilient and sustainable neighborhoods.

This agenda item also supports the Tennyson Corridor strategic initiative, which has a purpose of developing an attractive, cohesive, thriving Tennyson Corridor through thoughtful engagement of residents, businesses and community partnerships. This item supports the following goal and objective:

Goal 5: Increase Community Resiliency.

Objective 5.f: Reduce resident utility bills through efficiency.

FISCAL IMPACT

The funding for the program is \$1,000,000 from the Water Improvement Capital Fund, which will be paid back over time with interest through a surcharge on each participating customer's water bill. The City is currently receiving money back through the surcharges on the four completed projects. If customers select reduced repayment terms, the City would receive less interest over the life of the repayment. However, the Water Fund would receive its money back sooner.

SUSTAINABILITY FEATURES

Water: Access to on-bill financing through the PAYS® program enables water upgrades, which will reduce Hayward's per capita water consumption. The hope is that there will be greater participation in the PAYS® program if flexible repayment terms are introduced.

Energy: Access to on-bill financing through the PAYS® program enables energy efficiency upgrades, which will reduce the community's reliance on fossil fuels.

NEXT STEPS

If Council adopts the attached resolution, then staff will complete the program updates and notify potential customers of the change.

Prepared by: Mary Thomas, Management Analyst

Recommended by: Alex Ameri, Director of Utilities & Environmental Services

Approved by:

A handwritten signature in black ink, appearing to read 'K. McAdoo', is positioned above a horizontal line.

Kelly McAdoo, City Manager