

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: OCTOBER 22, 2018

ITEM NO: 9

SUBJECT: RIVERSIDE PUBLIC UTILITIES SCHOOL EDUCATION PROGRAM UPDATE AND NEW, ANNUAL ENGINEERING ESSAY CONTEST WITH CASH AWARDS TOTALING \$1,200

ISSUES:

Receive and file update on the Riverside Public Utilities' School Education Program, and approve a new, annual engineering essay contest with cash awards totaling \$1,200.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Receive and file update on the Riverside Public Utilities' School Education Program; and
2. Approve creation of a new, annual engineering essay contest with cash awards totaling \$1,200.

BACKGROUND:

California Assembly Bill 1890 (1996) requires publicly owned utilities to design and implement programs promoting energy efficiency and conservation to benefit ratepayers. In addition to the many rebate and conservation programs and services developed at that time, Riverside Public Utilities (RPU) chose to use this opportunity to make an investment in Riverside's students, creating the RPU School Education Program.

Funded through the Public Benefits Charge, an education coordinator was hired in 2001 to develop a fourth-grade level class on electricity, safety and energy conservation. This standards-based science class was offered free of charge to fourth-grade classrooms in the RPU service area. In 2004, a water conservation class was added to the program. Designed to teach science concepts related to water and conservation, the class is offered to fifth-grade classrooms in the RPU service area. The water education program is funded through the Water Conservation Surcharge.

In 2011, RPU updated the water and electric class content and aligned the curriculum with the California Next Generation Science Standards to keep current with trends in science education and increase the emphasis on environmental literacy. To extend the lesson, RPU staff provide science loan kits which are left behind after the classroom presentations. Additionally, age-appropriate and content-specific trade books are curated for donation to school libraries, following classroom visits, to further supplement instruction. The objectives of the program continue to focus on water and energy conservation, as well as the promotion of RPU as a unique community asset.

In addition to student and teacher testimonials, the success and popularity of RPU's School Education Program can be seen in the participation numbers. In 2017, the program recorded a total of 1,323 classroom presentations and distributed 15,698 science loan kits.

DISCUSSION:

Since RPU's program update in 2011, the Education Program has grown in participation by nearly 90%. Some of this increase can be attributed to the addition of new programs reaching students in grades not previously included in programming, such as the third-grade watershed pollution class and the sixth-grade wind energy/engineering class.

Additional increases can be attributed to dramatically increased participation in non-classroom educational events such as the Science and Technology Education Partnership (STEP) Conference; Councilmember Perry's Books with Friends events; Big Brothers Big Sisters of the Inland Empire Science, Technology, Engineering, and Mathematics (STEM) education events; the Less Water-More Summer Fun water-wise gardening education event at the Kathleen Gonzales Waterwise Garden; and the first-ever STEM Public Utility Learning Labs (PULL) week with high school students at Bourn's Technology Center.

Future program development efforts will continue to expand the scope of work and increase the reach of RPU's Education Program as staff prepares to launch the first annual engineering essay contest for high school students, complete a community helpers unit for early elementary students focusing on a day in the life of a lineman, develop a Green Schools Program for middle schools and develop collaborative opportunities with teachers for externships and workshops. In addition, staff will explore partnership opportunities with community organizations interested in providing monetary or in-kind educational sponsorships in exchange for recognition on RPU's website and event marketing.

The purpose of the new engineering essay contest is to expand the objectives of RPU's School Education Program to include utilities workforce development. The contest goal would be to challenge high school participants to help solve Riverside's water and energy challenges through use of modern engineering practices. In the first year, students will be asked to focus on water supply, climate, population and environmental issues. The contest will be promoted through local high schools and judged by RPU engineering staff. The three contest winners will receive cash awards as follows: first place, \$600; second place, \$400; and third place, \$200 for a total of \$1,200.

FISCAL IMPACT:

The total fiscal impact is \$1,200. Sufficient funds are available in Public Utilities Education Contest Account No. 6020000-456087.

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Approved as to form:	Gary G. Geuss, City Attorney

Certifies availability of funds:	Laura M. Nomura, Utilities Assistant General Manager/Finance & Administration
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Attachment:	Presentation
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