

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT BOARD OF EDUCATION

Agend	a Ite	em#	9.2

Meeting Date: October 18, 2012

Sub	iect:	SCUSD	Resource	Conservation	Incentive	Program
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\boxtimes	Information Item Only
	Approval on Consent Agenda
	Conference (for discussion only)
	Conference/First Reading (Action Anticipated:)
	Conference/Action
	Action
	Public Hearing

Division: Capital Asset Management Services

Recommendation: Receive information on the SCUSD Resource Conservation Incentive Program.

Background/Rationale:

Over the past five years the District has realized the advantages of tracking and monitoring utility usage at each site. As part of the new Resource Conservation program, we have established the framework to implement an incentive program that will work in collaboration with school sites to encourage the conservation of energy and water across the District. This program is called the SCUSD Resource Conservation Incentive Program (RCIP) and will be launched this school year at all school sites.

The SCUSD Resource Conservation Incentive Program (RCIP) focuses on conservation and cost savings through user education and financial incentives. The program compares baseline information of energy, water usage, and cost for a school with current energy, water usage, and cost as measured by utility bills for any specific school. Baseline information is determined by a moving five-year average. The basic premise is to return 50% of the financial savings realized by reduced consumption and cost to the District into a reward pool. The reward pool would be distributed to school sites realizing reduced consumption, and cost to support their teaching and learning efforts.

Financial Considerations:

The SCUSD Resource Conservation Incentive Program is designed to save District general funds through energy and water conservation. Fifty percent of such savings will be returned to school sites achieving a reduction in use and cost.

Documents Attached:

Executive Summary SCUSD Resource Conservation Incentive Program Draft

Estimated Time of Presentation: 5 minutes

Submitted by: Gregg M. Heberling, Resource Conservation

Specialist

Approved by: Jonathan P. Raymond, Superintendent

Board of Education Executive Summary

Capital Asset Management Services

SCUSD Resource Conservation Incentive Program October 18, 2012



I. Overview/History of Department or Program

Introduction to the SCUSD Resource Conservation Incentive Program (RCIP)

During the 2011-2012 school year, the Sacramento City Unified School District spent \$8.2 million of the General Fund on energy (electricity and natural gas) and water. This amount represents approximately 2.0% of the 2011-2012 General Fund. Electricity usage at the District's school sites comprises the overwhelming majority of the District's utility costs.

Since the school sites are the District's greatest energy consumers, efforts to reduce consumption and lower costs will provide the most return if the conservation program focuses on students and school site staff. Project Green is focused on the school sites by providing education, community outreach, and coordination. A powerful tool to add to Project Green is a financial incentive for school sites to reduce energy and water consumption.

The Resource Conservation Incentive Program (RCIP) focuses on conservation and cost savings through user education and financial incentives. The program compares baseline information for a school with current energy costs and energy usage as measured by utility bills for the school. Baseline information is determined by a moving five-year average.

The basic premise is to return a portion of the financial savings realized by reduced consumption at the school sites back to the school sites to support teaching and learning efforts.

II. Driving Governance:

Board Policy 3511: Grimes-Kennedy Green and Grid Neutral Model Schools Policy Initiative.

III. Budget:

It is critical that an overall District utility cost savings be achieved to ensure that incentive dividends are available. A dividend award pool will be created with 50% of the overall District utility cost savings.

IV. Goals, Objectives and Measures:

Participation in the base program is automatic. All school sites would receive a base dividend calculated on the energy and water cost savings they realize over set periods of time. While participation in the program is automatic, school sites would need to implement conservation strategies to achieve reductions in energy and water consumption.

Schools demonstrating superior reductions in energy and water consumption would be provided additional dividends.

Department 1

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Schools showing creativity in their energy and water use reduction strategies would be provided additional dividends.

A web page detailing the RCIP will be maintained on the district's website. A "data dashboard" identifying baseline consumption, monthly targets, monthly performance, and awarded achievement will be posted on the web page.

An RCIP panel (to be determined but could include students, parents, staff, and community members) will be established to coordinate, review, and make necessary adjustments to the RCIP.

V. Major Initiatives:

The RCIP will continue the successes achieved through utility monitoring while also engaging the site personnel through a shared savings program. The site incentive has the potential to increase savings District wide. RCIP will also support student participation through grade level appropriate engagement and information sharing to all school sites.

VI. Results:

- All schools sites will automatically be enrolled in the SCUSD Resource Conservation Incentive Program.
- The installation of the Energy Management Control System (our centrally located HVAC management) allows for ease of system monitoring.

VII. Lessons Learned/Next Steps:

- Greater savings can be achieved through a shared savings program.
- The benefits of monitoring utility bills and cost.
- Work with interested site personnel to expand program and encourage stronger participation through green teams, audits, and out-of-the-box thinking.
- Working with the Center for Green Schools Fellow, Farah McDill, to encourage further participation through site green teams and Project Green.

Department 2

SCUSD RESOURCE CONSERVATION INCENTIVE PROGRAM (RCIP)



October 2012

Resource Conservation Incentive Program

The SCUSD is committed to conserving energy and water through the grassroots participation of its students and staff. Encouraging conservation improves our environment and through education we can help provide students with lifelong conservation skills.

SCUSD Resource Conservation Incentive Program (RCIP)

RESOURCE CONSERVATION INCENTIVE PROGRAM

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I. BACKGROUND

The purpose of this report is to provide the framework to implement an incentive program that will work in collaboration with Project Green to encourage the conservation of energy and water at the District's school sites. This program is called the Resource Conservation Incentive Program, or RCIP for short.

Project Green is a District energy and water conservation initiative to encourage and involve students and site staff to reduce energy usage and costs. In a broad perceptive, it is critical that students and staff are educated in conservation and reduce the demand on our natural resources which can result in improved air and water quality. More specifically, it is essential that the SCUSD lower its operating costs in part by reducing energy and water costs.

This RCIP report will provide details for an incentive program for school sites to conserve energy and water. The incentive program must be strongly and concurrently supported by an education program such as Project Green.

II. BASICS OF THE RESOURCE CONSERVATION INCENTIVE PROGRAM (RCIP)

During the 2011-2012 school year, the Sacramento City Unified School District spent \$8.2 million of the General Fund on energy (electricity and natural gas) and water. This amount represents approximately 2.0% of the 2011-2012 General Fund. Energy and water usage at the District's school sites comprise the overwhelming majority of the District's utility costs.

Since the school sites are the District's greatest energy consumers, efforts to reduce consumption and lower costs will provide the most return if the conservation program focuses on students and school site staff. Project Green is focused on the school sites by providing education, community outreach, and coordination. A powerful tool to add to Project Green is a financial incentive for school sites to reduce energy and water consumption.

The proposed Resource Conservation Incentive Program (RCIP) focuses on conservation and cost savings through user education and financial incentives. The program compares baseline information for a school with current energy costs and energy usage¹ as measured by utility bills for the school. Baseline information is determined by a moving five-year average.

The basic premise is to return a portion of the financial savings realized by reduced consumption at the school sites back to the school sites and support teaching and learning efforts.

Participation in the base program is automatic. All school sites would receive a base dividend calculated on the energy and water cost savings they realize over set periods of time. While

 H^1 It is important that energy unit cost be considered in the calculations of cost savings. Due to fluctuations in energy and water unit prices, it is possible a school could use less energy and water over a specific period of time and realize a cost increase. It is critical that overall district cost savings be achieved to ensure incentive dividends are available.

participation in the program is automatic, school sites would need to implement conservation strategies to achieve reductions in energy and water consumption.

- Schools demonstrating superior reductions in energy and water consumption would be provided additional dividends.
- Schools showing creativity in their energy and water use reduction strategies would be provided additional dividends.
- Awards for the base program dividends would be made on a monthly basis. Awards for superior performance and creativity would be awarded each school year.
- A web page detailing the RCIP will be maintained on the districts website. A "data dashboard" identifying baseline consumption, monthly targets, monthly performance, and awarded achievement will be posted on the web page.
- An RCIP panel will be established to coordinate, review, and make necessary adjustments to the RCIP.
- Dividend awards are always related to a percentage of actual cost avoidance (50%) at the District level. This ensures that award of the dividends will never exceed 50% of the actual cost avoidance. This will result in a financial "win-win" for the District and the school sites.

III. RCIP DEFINITIONS

RCIP: Resource Conservation Incentive Program

RCIP Share of Savings: The percentage of the estimated annual savings that will be provided for the RCIP Pool. The District's Energy Conservation Specialist will work closely with the Budget Services Department to determine projected yearly utility budgets for each of the District sites, based on typical usage and rate information from Sacramento Municipal Utility District, Pacific Gas and Electric and area water providers.

RCIP Pool: The amount of funding annually available to the RCIP. The RCIP Pool is a predetermined percentage of the District-wide annual anticipated percentage cost savings adjusted by the anticipated changes in Unit Costs. The RCIP Pool will be established at the start of the school year and fully expended at the completion of the school year.

Unit Cost: The cost per unit for electricity, gas, and water.

Baseline Use: The average unit use of a school calculated on a five-year rolling history. The five-year history would "roll" from year to year as an additional year's data becomes available. This baseline would be used to forecast the RCIP Pool. The District's Resource Conservation Specialist will work closely with the Budget Services Department to determine projected yearly utility budgets for each of the District sites, based on typical usage and rate information from Sacramento Municipal Utility District, Pacific Gas and Electric and area water providers.

RCIP Panel: A broad-based executive committee established to oversee and implement the RCIP. The RCIP Panel will have complete authority to make RCIP Pool dividend awards and to make adjustments to the RCIP Program. Decisions of the RCIP Panel shall be final. The RCIP Panel will adopt procedures to hear appeals from school sites regarding unusual circumstances.

Base Dividend: On a monthly basis², the total energy savings of all schools will be combined and each school would be given a dividend based on their savings contribution.

Superior Performance Dividend: School sites realizing the highest reductions in energy and water costs would be provided additional dividends.

Creative Ideas Award: Schools demonstrating creative approaches or meeting high levels of participation in "green" strategies would be awarded a Creative Ideas Dividend.

IV. RCIP PROGRAM DETAILS

RCIP Base Program:

The Base Resource Conservation Incentive Program (RCIP) will return a percentage of the District's annual energy and water conservation savings to all school sites that realize a reduction in energy and water usage. The purpose of this reward is to incentivize school sites to take an increasingly active role in conserving energy and water and to reduce the District's overall operational costs. The base incentive is referred to as the "Base Dividend". All schools achieving a reduction in consumption will receive a base dividend on a per student basis. The larger a school's enrollment, the larger the base dividend would be. All schools are automatically enrolled in the base RCIP. Base dividends would be paid to the schools realizing a reduction in energy use on a monthly basis. The base dividend would be unrestricted with its specific use to be determined by the site administrator.

RCIP Superior Performance Dividend:

Each school year the RCIP Panel will make Superior Performance dividend awards to the school sites that have realized the greatest reduction in energy use (electricity and gas combined) and in water use. Dividend awards will be awarded to elementary schools, K-8, middle school, high schools, and charter schools separately. At the discretion of the RCIP Panel, multiple schools within each category may be awarded Superior Performance Dividends.

RCIP Creative Performance Dividend:

² Dividends will go out to the sites on a yearly basis. This will provide faster feedback to the schools on their efforts and it will keep the students and staff better engaged.

Each school year the RCIP Panel will make Creative Performance dividend awards to the school sites that have demonstrated creativity in their energy and water conservation efforts. Award of the Creative Performance Dividends is at the discretion of the RCIP Panel.



2013-2014 RCIP Pool:

The RCIP will be fully implemented for the start of the 2013-2014 school year. The 2013-2014 RCIP Baseline will be determined by energy and water use and costs starting with the 2007-2008 school year. It is a reasonable goal that school sites can reduce their energy consumption costs by 15% compared to the 2013-2014 RCIP Baseline. This would result in a 2013-2014 cost savings of \$1,215,000 as compared to the 2013-2014 RCIP Baseline.

The estimated 2013-2014 cost avoidance of \$1,215,000 would be shared by the District and the RCIP Pool. It is recommended that the RCIP Pool be set as 50% of the estimated 2012-2013 cost avoidance of \$1,215,000. This would provide a potential 2013-2014 RCIP Pool of \$607,500.

Dividend Distribution by Type:

The RCIP Pool would be divided into three parts. These parts would be the Base Dividend, the Superior Performance Dividend, and the Creative Ideas Dividend. The program would prorate 40% of the RCIP Pool to the Base Dividend, 30% to the Superior performance Dividend, and 30% to the Creative Dividend. Table 1 below illustrates the RCIP Pool structure.

Table: 1: Anticipated 2013-2014 RCIP Pool

2013-2014 RCIP Pool	Base Dividend (40%)	Superior Performance Dividend (30%)	Creative Ideas Dividend (30%)
\$607,500	\$243,000	\$182,250	\$182,250

Note: RCIP Pool calculated on an estimated 15% cost savings over the five-year RCIP Baseline.

District Retained
Cost Savings,
\$607,500

Superior
Performance
Dividend,
\$182,250

Creative Ideas
Dividend,
\$182250

Dividend Distribution by School:

Once the distribution of the RCIP Pool by dividend type is determined (See Table 1), how it is available to be distributed must be identified.

The RCIP Base Dividend will be distributed to qualifying schools (schools achieving a reduction in energy or water usage in the previous month) based on their 2013-2014 CBEDS enrollment³. The total enrollment of the schools eligible to receive a monthly Base Dividend will be determined and an individual school's Base Dividend will be prorated based on their enrollment as a percentage of the total eligible enrollment.

The Superior Performance Dividend available for distribution in late 2014 will be \$243,000 (See Table 1). The Superior Performance Dividend will be fully distributed to the schools achieving the greatest consumption reduction from September 2013 through April 2014. At a minimum one elementary, middle, high, and charter school will receive Superior Performance Dividends. Other schools may receive Superior Performance Dividends at the discretion of the RCIP Panel.

The Creative Ideas Dividend for 2013-2014 will be 40% of the RCIP Pool (\$243,000). The Creative Ideas Dividend will be fully distributed and the schools chosen to receive this dividend will be at the discretion of the RCIP Panel.

V. RCIP PROGRAM IMPLEMENTATION TIMELINE

It is anticipated the RCIP will be fully implemented for the start of the 2013-2014 school year. In order to meet this schedule, the following timeline is proposed.

Board Approval of RCIP Program Concept	October 2012
Select RCIP Panel	November 2012
Determine 2013-2014 RCIP Baseline, Share of Savings, and Pool	June 2013
Complete 2013-2014 Implementation Plan	July 2013
Site Staff informational meeting to roll-out RCIP	August 2013
Launch RCIP website	August 2013
Start RCIP	September 2013
Complete 2014-2015 RCIP Implementation Plan	June 2014

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³ Since CBEDS counts are taken in October, for the month of September, the most current available enrollment numbers will be used.

RESOURCE CONSERVATION INCENTIVE PROGRAM

FREQUENTLY ASKED QUESTIONS

What is the Resource Conservation Incentive Program (RCIP)?

The Resource Conservation Incentive Program (RCIP) is an incentive program that will return a portion of the savings realized through use reduction to the school sites. By combining a positive financial incentive with the District's ongoing sustainable programs ("green" programs) it is anticipated that a "win-win" of District-wide cost savings and additional school site revenues will occur.

How does the RCIP Work?

In general, the District will set a use reduction goal at the start of each school year. The use reduction goal will be applied to anticipated utility costs. This will identify a total savings goal for the year. A percentage of the anticipated savings will be set aside as an "RCIP Pool" to be distributed to the school sites that meet certain conservation criteria.

How will the savings be distributed to the school sites?

The RCIP Pool will be divided into three categories, or "dividends." The first dividend is the Base Dividend and will be awarded to all school sites that reduce their utility consumption compared to a historical usage base. The second dividend is called the Superior Performance Dividend. It will be distributed to the schools that realize the highest levels of utility use reduction and cost savings. The third dividend is the Creative Idea Dividend which will be distributed each year to the schools that demonstrate the most creative ideas related to resource conservation and sustainable practices.

How much will the dividends be?

The exact amount of the dividends will be determined by the number of schools that qualify for each dividend and the actual utility cost savings realized by the District. It is the intent of the RCIP to provide substantial dividends.

What if a school reduces its consumption but costs actually go up?

Distribution of dividends will only be possible if there are actual cost savings. If there are no cost savings, there cannot be an RCIP Pool to distribute.

Who determines which schools receive dividends?

A broad-based executive committee will be established to oversee and implement the RCIP. The RCIP Panel will have complete authority to make RCIP Pool dividend awards and to make adjustments to the RCIP Program. Decisions of the RCIP Panel shall be final. The RCIP Panel will adopt procedures to hear appeals from school sites regarding unusual circumstances.

How is utility usage calculated and what is it compared to in order to determine which schools receive the Base Dividend?

All schools achieving a reduction in consumption will receive a Base Dividend on a per student basis. The larger a school's enrollment, the larger the Base Dividend would be. All schools are automatically enrolled in the base RCIP. Base Dividends would be paid to the schools realizing a reduction in energy use on a monthly basis.

The average utility unit use of a school is calculated on a five-year rolling history. The five-year history would "roll" from year to year as an additional year's data becomes available. This baseline would be used to forecast the RCIP Pool. The District's Resource Conservation Specialist will work closely with the Budget Services Department to determine projected yearly utility budgets for each of the District sites, based on typical usage and rate information from Sacramento Municipal Utility District, Pacific Gas and Electric and area water providers.

Will all funds in the pool be distributed?

It is the intent to fully distribute all funds in the RCIP Pool.

Can more than one school be awarded Superior and Creative Idea Dividends?

Yes. Award of these dividends will be determined by the RCIP Panel.

When will the RCIP begin?

The RCIP will begin at the start of the 2013-2014 school year.

Where can I find out more information about the RCIP?

Additional information about the RCIP can be obtained by contacting the SCUSD Maintenance and Resource Conservation Department.

How are the dividends calculated?

The Dividend Pool would be determined as 50% of the actual cost savings realized by the District compared to historic baseline usage and costs. Actual cost savings must be realized for the RCIP Pool to be funded. Base Dividends would be provided to all school sites demonstrating a reduction in monthly usage. Superior Performance and Creative Idea Dividends would be awarded to qualifying schools each year.

Award of the Base Dividend is dependent on reducing monthly consumption compared to past baseline usage. Award of the Superior Performance and Creative Idea Dividends will be determined by the RCIP Panel.

The amount of the dividends each school may receive is dependent on the funding level of the RCIP Pool and the number of schools that are awarded dividends. If the District meets its projected savings goals, the amount of the dividends will be substantial.

Are there any restrictions on how school sites could use the funds provided by the dividends?

The dividends would be unrestricted and use of the dividends would be determined by the school site.

Please provide an example of how the RCIP would work at two hypothetical schools sites?

School "A" reduces its monthly utility consumption in October 2012 as compared to October 2011. The school would split (on a weighted average based on enrollment) the Base Dividend Pool for October 2012. The

Base Dividend Pool amount would be determined as 40% of the actual energy cost savings for October 2012 compared to the October baseline usage.

School B (elementary school) does not reduce its consumption during any month in the 2012-2013 school year based on baseline usage, but the school implements an outstanding program to educate the local elementary school community regarding sustainable practices. School B would likely receive a Creative Idea Dividend. The amount of the dividend would be determined as 30% of the RCIP Pool, divided by the number of schools that receive Creative Idea Dividends (prorated on share based on enrollment).