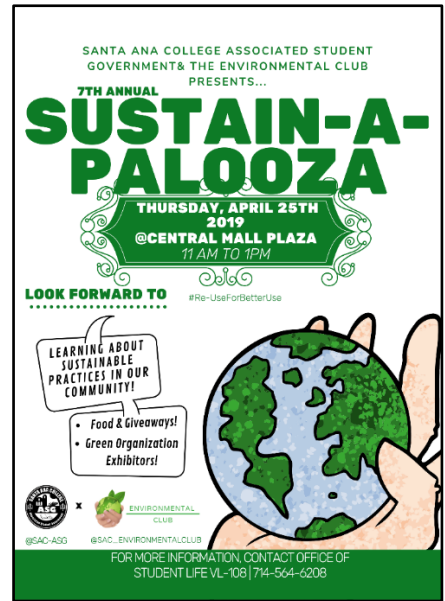


# SUSTAINABILITY REPORT



Period Covering July 1, 2018 – March 1, 2021

Approved by the Sustainable RSCCD Committee

March 17, 2021

Revised on August 25, 2021

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## ***INTRODUCTION***

On March 3, 2015, the Rancho Santiago Community College District (RSCCD) Board of Trustees approved a District Sustainability Plan (“Plan”). The Plan outlined eight (8) goals in areas of sustainability: Campus & Community Engagement, Curriculum Development, Energy, Facilities Design & Operation, Solid Waste Management, Sustainable Procurement, Transportation and Water Management.

This report was compiled on behalf of the Sustainable RSCCD Committee (SRC) by the Facility Planning, District Construction and Support Services Department and covers approximately a two-year fiscal period. Due to the Covid-19 pandemic in 2020, the committee ran behind schedule in completing its biennial report. Therefore, this report covers the period of July 1, 2018 – March 1, 2021. The information was compiled through a collaborative effort between the colleges, District and members of the SRC. The report highlights the achievements, projects, programs, and plans completed as well as the work currently in progress in various phases of planning and implementation.

The SRC’s primary goal over the last several years has been focusing on reducing plastic and paper consumption. It was an objective of the committee to see that a new waste hauling service provider be contracted with who can assist the District in allowing for more sorting options in collection of waste, and by providing more detailed recycling data for the various sites.

Many sustainable activities are on-going and several projects have been completed to meet the goals of the plan. The committee has reorganized the reporting method for the activities, programs, and projects to align the report outcomes with the identified eight (8) goals of the Plan. This reorganization of the reporting format allows for easier collection of information by members of the SRC and is easily comprehensible to interested individuals. The SRC will continue to focus on implementing programs and projects outlined in Section 4 of the Plan: Sustainable Programs and Projects for Implementation.

The SRC continues to strive towards implementing the goals of the Sustainability Plan and is proud to present the attached report covering the period of July 1, 2018 – March 1, 2021.

### **Achievements:**

- Compiled Utility Data Use for the last 8 years and established the baseline year as 2012-2013.
- The District has met the original goal stated in the Sustainability Plan 2015 to reduce energy consumption by 5 % from baseline year (2012-13).
- Districtwide there has been an average reduction by 13% in electricity and 21% in gas over the last 5 years when compared to the baseline year.
- California was in a severe drought from 2012 to 2015 and a statewide mandate for water conservation was implemented in 2015. Governor Brown’s 2015 Executive Order and subsequent State Water Resources Control Board (SWRCB) drought regulations require the District to conserve water.
- The District has met the 5% reduction water use goal.
- Districtwide there has been a water use reduction by 28% over the last 5 years in comparison to the baseline year.
- Successfully completed all Five Years of energy efficient projects utilizing Proposition 39 state funding and passed all state audits.
- Incorporated several sustainable features in the new construction projects at both colleges.
- Accomplished the procurement of several new sustainable products and equipment.
- Contracted with a new waste hauler to track and provide data on waste and recyclable materials.

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Goals established by the Committee for the past two years and the fiscal year 2021 are as follows:

- Reuse for Better Use initiative for plastic reduction
- Paper reduction

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## ***SUSTAINABLE RSCCD COMMITTEE MEMBERS: 2018-2021***

### **Santa Ana College**

Bart Hoffman, Interim Vice President, Administrative Services (2018-Current)

James Kennedy, Ed.D., Vice President, Continuing Education Centennial Education Center (2016-Current)

Kimo Morris, Ph.D., Faculty (2016-2020)

Kelly Ro, Faculty (2018-2019)

Aggie Sehm, Classified Staff (2018-Current)

Luis Ortiz, Student (2018-2019)

Omar Cortes, Student (2019)

### **Santiago Canyon College**

Arleen Satele, Ed. D., Vice President of Administrative Services (2016-Current)

Jose Vargas, Vice President of Continuing Education Orange Education Center (2016-2019)

Angela Guevara, Faculty (2017-Current)

Mary Mettler, Faculty (2020-Current)

Ambar Nakagami, Classified Staff (2018-Current)

Nicholas Valle, Student (2018-2019)

Jocelyn Montiel (2020-Current)

### **District Office**

Raúl Rodríguez, Ph.D., Chancellor (2016-2019)

Carri Matsumoto, Assistant Vice Chancellor, Facility Planning, District Construction & Support Services (2016-Current)

Leanna Nolan, Classified Staff (2018-2019)

Stephanie Yamoto, Classified Staff (2019)

Simone Wolfe, Classified Staff (2019-Current)

## GOALS OF THE SUSTAINABILITY PLAN

The Sustainable RSCCD Committee (SRC) has identified the following sustainability goals and priorities. The goals and priorities for the Sustainability Plan reflect campus needs, interests, and available resources.

### Goal 1- Campus & Community Engagement

Encourage participation in and awareness of sustainability issues through effective education and engagement. Integrate sustainability into all facets of student life, including student government, clubs, and organizations.

### Goal 2- Curriculum Development

Facilitate the inclusion of environmental sustainability and social responsibility into existing curriculum and develop new curricula and career-oriented certificate and training courses with an emphasis on sustainability.

### Goal 3- Energy

Utilize 2012-2013 benchmark study to establish annual energy use and demand reduction goals (target 5% reduction). Plan appropriate energy efficiency, demand reduction, or clean self-generation measures by mid-2015 to meet reduction goals.

### Goal 4- Facilities Design & Operation

Design and construct all major capital projects and renovations to meet LEED Silver “equivalent” standard and operate facilities to meet solid waste, energy, and water use reduction goals. Employ sustainable landscaping practices.

### Goal 5- Solid Waste Management

Continue to implement the landfill diversion program, expand it to include all sectors of recycling and waste reduction to landfills, and strive to meet the statewide landfill recycling goal of 75% by 2020.

### Goal 6-Sustainable Procurement

Implement efforts to source campus food, materials, supplies, information technology, equipment, and resources from organizations committed to social responsibility and environmental sustainability.

### Goal 7- Transportation

Reduce the reliance of students, faculty, and staff on single occupancy vehicle commutes by 5% within the next five years, and encourage the use of low and zero emissions vehicles.

### Goal 8- Water Management

Perform water use benchmarking studies at both campuses and the District Office to better understand usage as compared to similar facilities and community college peers. Based on the results, establish annual water use reduction goals and plan appropriate measures to achieve goals.

The goals described above will apply to both Santa Ana College and Santiago Canyon College, the education centers, and the District Office. The goals are listed in numerical order, and are not necessarily listed by priority.

#### Vision Statement

*The Rancho Santiago Community College District holds sustainability to be a foundational principle in its current and future development. As a responsible steward of natural resources and the environment, the District will endeavor to minimize its impact on the environment by implementing best practices for conserving resources, reducing waste, implementing energy reduction and alternative energy generation strategies, constructing efficient buildings, and by developing partnerships that will further these activities.*

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## GOAL 1: CAMPUS & COMMUNITY ENGAGEMENT

### Goal Description

Encourage participation in and awareness of sustainability issues through effective education and engagement. Integrate sustainability into all facets of student life, including student government, clubs, and organizations.

### ACHIEVEMENTS:

#### A. Created a Sub-Committee in the Associated Student Government Devoted to Sustainability

##### Santa Ana College:



**Mission Statement:** The Associated Student Government of Santa Ana College (ASGSAC) advocates on behalf of students on issues that affect students and ensures a student voice in the decision-making processes of the college. The ASGSAC ensures that a variety of clubs and organizations are available for students to join and is committed to ensuring that students have a fun and eventful learning environment on campus. Also, ASGSAC hopes that all students have an opportunity to participate in extra and co-curricular activities and to enhance their college experience.

The Associated Student Government (ASG) has created a Sustainability Commissioner position and this position serves on the Sustainable RSCCD committee and promotes sustainability efforts within ASG as well as provides a student voice for sustainability advocacy for the students. The position leads the student effort for the annual Earth Day event. The Sustainability Commissioner brings together a group of interested students to help promote sustainability named the Sustainability Committee. Their mission, similarly to the Commissioner's responsibilities are to promote sustainability efforts within ASG as well as provide a space for sustainability advocacy. In helping to bring awareness to the student body, the committee is currently working on a project that promotes recycling, composting, and renewing. This project will launch for Earth Day in April 2021.

##### Santiago Canyon College:



**Mission Statement:** The purpose of the Associated Student Government of Santiago Canyon College (hereafter referred to as "ASG") shall be to engage in student representation and involvement at Santiago Canyon College (hereafter referred to as "SCC") by safeguarding shared governance and democracy through the establishment of this Constitution; to influence institutional policy affecting student affairs; to facilitate campus-wide activities for the improvement of student life, and to provide a platform for the fundamental development of a cohesive and accountable group of student leaders.

The Associated Student Government of Santiago Canyon College established a "Green Operations Committee" and the committee continues to be active.

The position of Sustainability Commissioner is an appointed position. The Sustainability Commissioner is obligated to hold a minimum of one (1) event related to environmental sustainability and/or service in the fall and spring semesters. The Sustainability Commissioner is responsible for chairing the Sustainability Committee. The Sustainability Commissioner is mandated, but not limited to, attend the following required meetings: ASG Sustainability Committee meetings, ASG Activities Committee meetings, and ASG Executive Branch meetings. The Sustainability Commissioner shall present a report from their respective meetings to their governing bodies.

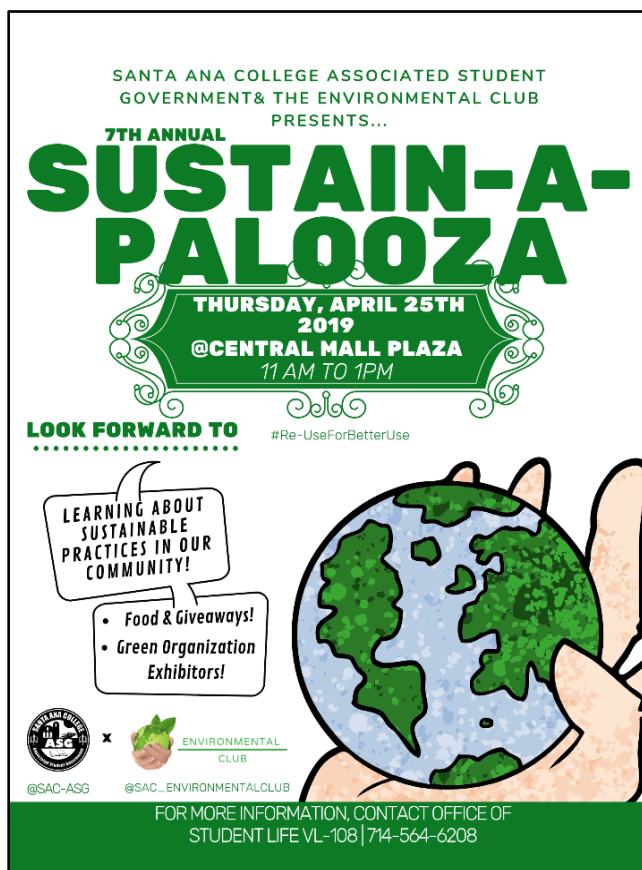
The position of Senator is an elected position. A Senator selected by the ASGSCC Vice President shall serve as the student representative to the Innovation and Sustainability Committee, which is responsible for making improvements to the campus. A Senator selected by the ASGSCC Vice President shall also serve as the student representative to the RSCCD Sustainability Committee. All Senators are mandated, but not limited to, attend the following required meetings: ASG Senate meetings and all assigned RSCCD and/or SCC governance committees. All Senators shall present a report from their respective meetings to their governing bodies.

## B. Sustainability Events

### Santa Ana College:

The College has hosted the 7<sup>th</sup> Annual Sustain-A-Palooza Earth Day event in 2019 which included the following activities:

- ASG engaged and encouraged the students into participating in the event by earning points for the Earth Day promotional items
- ASG promoted the bamboo utensils as a give-away to educate the participants on eliminating or reducing one time use and disposable products such as forks and spoons
- The District handed out plastic water bottles, stickers with the slogan “Reuse for Better Use” and updated campus maps that show the locations of hydration stations, bike racks and electric vehicle charging stations







**Santiago Canyon College:**

The College has hosted the annual Earth Day festivities in 2019 which included the following activities:

- Food trucks
- Tesla vehicles display by owners who collective meets and organized to participated in this event
- STEM science displays and demonstrations
- The District handed out plastic water bottles, stickers with the slogan “Reuse for Better Use” and updated campus maps that show the locations of hydration stations, bike racks and electric vehicle charging stations





The colleges had planned to hold annual Earth Day events in April of 2020, but were unable due to the COVID-19 pandemic.

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## ***GOAL 2: CURRICULUM DEVELOPMENT***

### **Goal Description**

Facilitate the inclusion of environmental sustainability and social responsibility into existing curriculum and develop new curricula and career-oriented certificate and training courses with an emphasis on sustainability.

### **ACHIEVEMENTS:**

#### **A. Utilize Different Pathways to Integrate Sustainability in the Curriculum**

##### **Santiago Canyon College:**

Many of the water courses deal with and facilitate the inclusion of environmental sustainability and social responsibility (e.g. water conservation and water quality). However, the college is currently not developing any “new curricula” and career-oriented certificate and training courses with an emphasis on sustainability other than the existing Water Utility Science courses; California Water Resources, Water Conservation Practitioner, and Water Reclamation and Reuse that deal specifically with water sustainability and social responsibility.

CVC-OEI CTE Pathways Grant: \$500,000 grant that was used to improve the quality, visibility, and access to credit and noncredit online CTE classes. This grant was for 2019-2020 and was completed June 30, 2020.

##### **Santa Ana College:**

New transfer, degree and certificate program for Environmental (Fire-CUPA) Inspector: Professor Hughes in Geology and the Fire Technology department chair, Suzanne Freeman are working to develop an Environmental (Fire-CUPA) Inspector Program that could transfer to a four-year university for an environmental degree. The pathway is needed to develop the hazardous materials inspectors that work for fire departments that perform CUPA (Certified Unified Program Agency) inspections and regulate the facilities that use, handle, or store large quantities of hazardous materials.

New transfer degree program in Emergency Management: College staff has participated in training with Federal Emergency Management Agency (FEMA) cohort for Hispanic and Black seeing institutions. The federal government is trying to recruit more underrepresented populations into the workforce. Santa Ana College continues to collaborate with the University of Alaska Fairbanks, as there are several student transfers into the University of Alaska Fairbanks Emergency Management Program (online) than any other college. Santa Ana College is looking to receive their curriculum so lower division courses could be offered. The academic curriculum for emergency management is based in environmental and climate science in addition to occupational coursework.

Current new curriculum adopted, program modification in process: A new hazardous materials course, Hazardous Mat Awareness became active this academic year at the college. Students completing the course will be State certified by either California Specialized Training Institute (CSTI) or the Office of the State Fire Marshal at the awareness level. This course is needed for fire inspectors (it is required to as a prerequisite to qualify for the national certification exam for fire inspector 1) and it is also required for fire inspector certification at the State level.

Wildland Mitigation Specialist (wildland fire prevention inspector) is a new degree and certificate program in planning. This is a fairly new occupation with national certification from the National Fire Protection Association

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(NFPA), released in 2018. This requires a degree and NFPA has released the recommended program of study. The college already has the majority of the coursework in their inventory.

Curriculum adoption implemented: The basic fire academy revised curriculum trains and certifies students as wildland firefighters to CalFire standards which allows them to work as wildland firefighters for the state without attending a CalFire academy.

Noncredit certificates have been created in the Energy, Construction and Utilities (OC priority sector) for Construction and HVAC, which provide the foundation knowledge for an entry point for employment.

Noncredit programs and Chancellor approved certificates facilitate the access to credit programs, certificates and degrees.

The college is slowly transitioning from physical textbooks and paper material to digital material.

The college is offering a robust selection of online courses which alleviates the number of classes taught in a physical classroom due to the Covid-19 pandemic.

In Fall 2020, the Apprenticeship Readiness Program in Construction integrated enhanced information to incorporate information related to Green Construction.

## **B. Enhance Student Distance Learning**

Temporary Remote Instruction (TRI) began March 22, 2020 due to the COVID-19 pandemic and both colleges offered remote learning classes.

## GOAL 3: ENERGY

### Goal Description

Perform energy use benchmarking studies at both campuses and the District Office to better understand District energy use as compared to similar facilities and community college peers. Based on the results, establish annual energy use and demand reduction goals and plan appropriate energy efficiency, demand reduction, or clean self-generation measures to achieve goals.

### ACHIEVEMENTS:

#### A. Energy Consumption Goal (Electricity and Gas)

“The District performed an energy benchmark study in 2012-13 using the Chancellor’s Office Energy Calculator” (Sustainability Plan). This became the baseline year for establishing the annual energy use reduction goals, and targeting an overall annual reduction of 5%.

- The District has met the original goal stated in the Sustainability Plan 2015 to reduce energy consumption by 5 % from baseline year (2012-13).
- Districtwide there has been an average reduction by 13% in electricity and 21% in gas over the last 5 years when compared to the baseline year.
- Districtwide there is a steady decrease in electricity usage, with 2019-20 being the largest decrease of about 24% compared to the baseline year. This is likely in part due to the pandemic and less use across facilities.
- Districtwide there has been a significant decrease in gas usage ranging between a decrease of 15% to 25% each year when compared to the baseline year.

#### B. Conduct Comprehensive Facility Energy Audits

- Prepared report of energy and gas consumption for all sites, using fiscal year 2012-2013 as a baseline year of measurement can be seen in Exhibit E (Electricity, Gas, and Water Consumption History FY2010-2020).
- The District conducts an annual review of electricity and gas use from a detailed billing summary generated by Southern California Edison (SCE) and Southern California Gas Company (SoCalGas).
- District compares the summary to the actual billing statements.
- District reviews the trends with the campus to discuss use and changes.

#### C. Summary of Current Accounts

##### 1. Electricity Table of Summary Accounts

Site	Number of Accounts, and Number of Meters	Service Period
District Operations Center	1 account; 1 meter	Mid-month
Santa Ana College	2 accounts; 2 meters	Mid-month
Santiago Canyon College	5 accounts; 5 meters	Mid-month
Orange Education Center	2 account; 2 meter	Mid-month
Orange County Sheriff’s Regional Training Academy	1 account; 1 meter	Mid-month
Digital Media Center	1 account; 1 meter	Beginning of the month
Centennial Education Center	1 account; 1 meter	Mid-month

- The electricity consumption summary 2010 to 2020 (Exhibit E) includes 13 active accounts, as well as 1 de-activated account that is no longer in use since September of 2017 (SAC site).

2. Gas Table of Summary Accounts

Site	Number of Accounts, And number of meters	Service Period
District Operations Center	1 account; 1 meter	Beginning of the month
Santa Ana College	3 accounts; 3 meters	Beginning of the month
Santiago Canyon College	2 accounts; 2 meters	End of the month
Orange County Sheriff's Regional Training Academy	1 account; 1 meter	Beginning of the month
Digital Media Center	1 account; 1 meter	End of the month
Centennial Education Center	1 account; 1 meter	Beginning of the month

The gas consumption summary 2010 to 2020 (Exhibit E) includes 9 active accounts, as well as 1 de-activated account that is no longer in use since March of 2018 (OEC site).

**D. Energy Summary Account Details by SCE & SoCalGas**

1. Electricity:

SCE provided the detailed electricity usage history summary and it includes the following information:

- Customer's Name (for all sites, it is Rancho Santiago College)
- Customer Account Number
- Service Account Number
- Customer Service Account Number
- SIC Code
- Current Rate
- Meter Number
- Service Street Address
- City Name
- Zip Code
- Billing Month and Year
- Meter Read Date (this is the end date of service)
- Statement Rate
- Billed Amount
- Kwh Usage
- City Tax and State Tax
- Maximum Kw
- Billing Date
- 34 columns of a complete breakdown of Summer Peak vs Winter Peak

The detailed summary includes all 13 active accounts and site, address, customer service account number or service account number. For tracking and trending purposes, some of the information is extracted from the detailed summary.

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2. Gas

The gas use history report is available on the SoCalGas on the website, which provides up to 25 months of billing history and it includes the following information:

- Date Mailed (billing statement)
- Billing Period; beginning date and end date (service period)
- Billed Days (number of days of service)
- Total of Therms
- Current Charges
- Total Amount Due

**E. Methodology for Maintaining and Monitoring Electricity and Gas Consumption**

To track consumption/use history for each site and accounts, a separate spreadsheet has been developed by the District for both electricity and gas. Each spreadsheet tracks individual accounts with the history from 2010 to current (2020). The District continues to collect the data consumption history to generate trending reports and summarize the overall total use of each account.

The District has obtained copies of the electricity and gas billing statements for comparisons and verification of the reports. SoCalGas offers copies of the billing statement online and it is only limited to 25 months. Previous billing history prior to 2015 was from the actual billing statements obtained from the Accounts Payable Department.

SCE billing statements were not available online. Therefore, copies of the billing statements were obtained from the Accounts Payable Department and these were only available from 2015 to current.

**F. Electricity and Gas Consumption Trends (See Exhibit E Electricity, Gas and Water Consumption History FY2010-2020)**

The District has collected utility sites as noted in attached Exhibit E and can now be evaluated for trends on a monthly, quarterly, annually and seasonal basis.

1. Electricity

Typically, for all the sites, the electricity consumption begins to increase in June and gradually increases through October. Summer months demand more kilowatts due to an increase use in cooling for buildings.

2. Gas

Gas use typically begins to increase around September through March. These winter months will demand more therms for the use of the heating system.

**G. Recommendations to Improve Consumption Management**

To improve and enhance the management of utility consumption at sites, the District and the Colleges need to continue to review utility bills on a regular basis (i.e. monthly, quarterly, annually) to monitor consumption and any anomalies in billing.

- Once a billing statement has been received by the Accounts Payable Department at the District office, it is very important that the department reach out to the campus and inquire if there was a reason for an increase of the service.
- A note to the actual billing statement shall be annotated for future reference.
- The District summarizes the usage history on an annual basis and reviews this with the colleges.

**H. State Funding and Incentive Programs**

- Proposition 39 is a state funded program offered to California K-12 and community colleges on projects as energy efficient by reducing the electricity usages by performance or by smart technology design.
- Leveraged State Scheduled Maintenance funding and Proposition 39 funding to complete multiple energy efficiency projects. See below summary of all Proposition 39 state funding. Year 5 was the last year of state funding for energy efficiency projects.

**PROP 39 PROJECTS**

**Santa Ana College**

- SAC LED Lighting (Year 1)
- SAC LED Building I & Z (Year 3)
- SAC EMS Upgrade (Year 4)

**Santiago Canyon College**

- SCC Science Ctr Building RCx (Year 1)
- SCC LED Conversion Project (Year 2)
- SCC Building D Chiller Replacement (Year 3)

**District Office**

- DO LED Conversion Project (Year 2)
- DMC & OCSRTA LED Project (Year 3)
- SAC, SCC, DMC & OCSRTA LED Project (Year 5)

**Summary by Year**

	<b>Expenses</b>	<b>State Allocation</b>	<b>Incentives</b>
<b>Year 1: 13/14</b>	\$ 1,687,135.00	\$ 1,017,539.00	\$ 321,066.40
<b>Year 2: 14/15</b>	\$ 980,817.00	\$ 816,070.00	\$ 216,820.56
<b>Year 3: 15/16</b>	\$ 899,355.00	\$ 831,201.00	\$ 89,758.51
<b>Year 4: 16/17</b>	\$ 1,236,854.00	\$ 1,055,957.00	Zero
<b>Year 5: 17/18</b>	\$ 1,096,902.00	\$ 993,328.00	\$ 31,298.30
<b>Totals</b>	<b>\$ 5,901,063.00</b>	<b>\$ 4,714,095.00</b>	<b>\$ 658,943.77</b>



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### Santa Ana College:

The Lighting Occupancy Sensor Retrofit project qualified as a Proposition 39 project by creating electricity savings in the amount of 48,724 kilowatt-hours per year. The installation of the lighting occupancy/vacancy sensors will automatically turn lights on when entering a space or off when leaving the space.



### Santiago Canyon College:

The U Portables HVAC Upgrades Phase 1 & Phase 2 projects qualified as a Proposition 39 project by replacing the existing HVAC system that was 15-20 years old with higher energy efficiency rated equipment, installing smart-technology thermostats, installing occupancy sensors to automatically shut off equipment, and installing new automatic outside air economizers to provide reduce cooling energy costs during optimal weather conditions. This created electricity savings in the amount of 38,292 kilowatt-hours per year.





**District Office:**

- District Office replaced the existing failing boiler with a new high efficiency boiler to provide heat to the building.



## GOAL 4: FACILITIES DESIGN & OPERATION

### Goal Description

Design and construct all major capital projects and renovations to meet LEED Silver “equivalent” standard and operate facilities to meet solid waste, energy, and water use reduction goals. Employ sustainable landscaping practices.

### ACHIEVEMENTS:

#### A. Facilities Design

##### Santa Ana College:

- The Johnson Student Center building is designed to meet Leadership in Energy and Environmental Design (LEED) Silver equivalence by United States Green Building Council. The project is still under construction and is anticipated to be complete this spring/summer for a Fall Semester 2021 opening. Some of the efficient elements include water-efficient landscaping and plumbing fixtures, highly efficient HVAC units, daylight harvesting, controlled electrical outlets, and separate building metering.

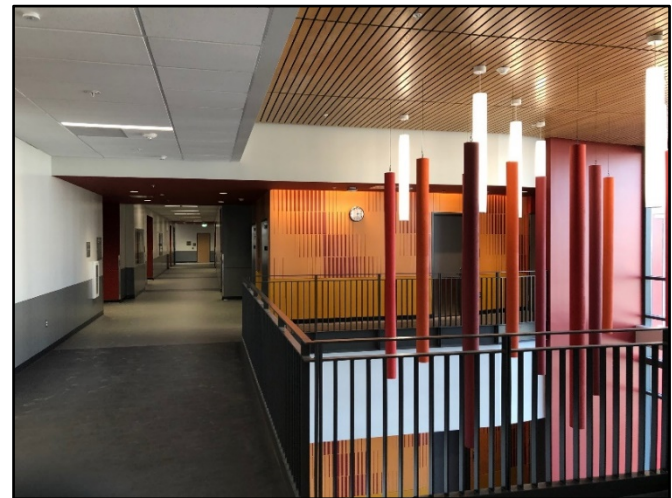






- The Science Center building is designed to meet Leadership in Energy and Environmental Design (LEED) Silver equivalence by United States Green Building Council. The project has been delayed and is still under construction to correct a window sealant adhesion problem and is anticipated to be complete in the summer of 2021. Some of the efficient elements include water-efficient landscaping and plumbing fixtures, highly efficient HVAC units, daylight harvesting, controlled electrical outlets, separate building metering. The building is 28% more energy efficient than required by code.





- The Health Sciences building is designed to meet Leadership in Energy and Environmental Design (LEED) Silver equivalence by United States Green Building Council. The project has just begun construction in March 2021. Some of the efficient elements include water-efficient landscaping and plumbing fixtures, highly efficient HVAC units, daylight harvesting, controlled electrical outlets, and separate building metering.





## ***GOAL 5: SOLID WASTE MANAGEMENT***

### **Goal Description**

Continue to implement the landfill diversion program, expand it to include all sectors of recycling and waste reduction to landfills, and strive to meet the statewide landfill-recycling goal of 75% by 2020.

### **ACHIEVEMENTS:**

#### **Districtwide:**

- WARE Disposal was selected as the new waste hauler for the District.
- The diversion report for the 2019 calendar year showed the total tonnage was 929.88 tons (525.84 trash / 183.36 recycling / 220.68 organics).
- The diversion report for the 2020 calendar year showed the total tonnage was 897.38 tons (489.03 trash / 177.32 recycling / 231.03 organics).

#### **Santiago Canyon College:**

- Drinking fountains and hydration stations were installed in Buildings D, G, and H to help reduce plastic water bottle consumption.  
Electric hand dryers were installed in Buildings D, E, G, H, L, SC, T and Concession Stand to help reduce paper towel consumption.



## GOAL 6: SUSTAINABLE PROCUREMENT

### Goal Description

Implement efforts to source campus food, materials, supplies, information technology, equipment, and resources from organizations committed to social responsibility and environmental sustainability.

#### A. Green Purchasing

##### Districtwide:

- Purchased less toxic cleaning solutions.
- LED lighting has reduced hazardous waste and the need to replace lamps.
- Continue to ensure paper products specified contain more recycled product.
- Continue to replace equipment with more energy efficient equipment such as copy machines, refrigerators, computers, etc.
- Paper used throughout the District, contains at least 30% recycled content.
- Paper towels are Green Seal GS-1 Certified, 100% recycled content, 65% post-consumer recycled content

Below are examples of some of the recycled products purchased Districtwide:



## GOAL 7: TRANSPORTATION

### Goal Description

Reduce the reliance of students, faculty, and staff on single occupancy vehicle commutes by 5 percent within the next five years, and encourage the use of low and zero emissions vehicles.

### ACHIEVEMENTS:

#### A. Improve Campus Fleet & Travel

##### District Operations Center:

- One Toyota Prius (2013)

##### Santa Ana College:

- One Toyota Prius (2013)
- Two Toyota Prius (2016)
- One Ford Hybrid Interceptor (2020)

##### Santiago Canyon College:

- One Toyota Prius (2014)
- One Toyota Prius (2017)



#### E. Encourage Electric Vehicles (EV) for Commuters

##### Santa Ana College:

- Ongoing assessment for future electric vehicle charging facilities.
- All new construction shall comply with California Green Building Code's Clean Air/Vanpool/EV requirements.
- Currently, in Parking Lot 11 there is one electric charging station servicing two stalls.
- Future installation plans in Parking lot 11, includes two electric charging stations servicing four stalls.
- At the completion of the new Health Sciences building, there will be three electric charging stations servicing five stalls, one of which is accessible (Parking Lot 6).

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**Santiago Canyon College:**

- The new Safety and Security Building has two electric charging stations servicing four stalls, one of which is accessible (Parking Lot 6).



## GOAL 8: WATER MANAGEMENT

### Goal Description

Perform water use benchmarking studies at both campuses and the District Office to better understand usage as compared to similar facilities and community college peers. Based on the results, establish annual water use reduction goals and plan appropriate measures to achieve goals.

### ACHIEVEMENTS:

#### A. Establish Water Conservation Goals

- California was in a severe drought from 2012 to 2015 and a statewide mandate for water conservation was implemented in 2015. Governor Brown’s 2015 Executive Order and subsequent State Water Resources Control Board (SWRCB) drought regulations require the District to conserve water.
- 2012-13 was used as a baseline year for comparison and the District established a 5% annual water reduction use.
- The District has met the 5% reduction water use goal.
- Districtwide there has been a reduction by 28% over the last 5 years in comparison to the baseline year.
- In response to the drought period in 2014-15, Districtwide various water conservation measures were implemented such as: posting signs regarding awareness in water use reduction; reducing irrigation to landscaping in some sites; and installing low-flow water toilets and faucets in some sites.
- Districtwide there was a significant reduction in water usage since 2014.

#### B. Conduct a Comprehensive Facility Water Audits

- Completed benchmark studies for all District sites.
- Established the fiscal year 2012-13 as the baseline year for water use consumption analysis, consistent with the electricity and gas baseline year (See Exhibit E-Electricity, Gas and Water Consumption History FY2010-2020).
- The District conducts an annual review of water utility bills and reviews the trends with the campus to discuss use and changes.

#### C. Summary of Accounts

Table of Summary Accounts:

Site	Water Utility Agency	Number of Accounts, and number of meters	2 Month Service Period *exception; monthly
District Operations Center	City of Santa Ana	1 account; 1 meter	Mid-month
Santa Ana College	City of Santa Ana	10 accounts; 10 meters	Mid-month (4) End of Month (6)
Santiago Canyon College	City of Orange	3 accounts; 5 meters	End of Month
Orange County Education Center	City of Orange	2 accounts; 3 meters	End of Month
Orange County Sheriff’s Regional Training Academy	Irvine Ranch Water District	5 accounts; 5 meters	Mid-month *
Digital Media Center	City of Santa Ana	2 accounts; 2 meters	End of Month
Centennial Education Center	City of Santa Ana	2 accounts; 2 meters	Beginning of the Month

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- The water consumption summary 2010 to 2020 (Exhibit E) includes 25 active accounts, as well as 1 account that was in-activated for Santiago Canyon College in January 2011.
  - The District's sites are within three water utility agencies: City of Santa Ana, City of Orange, and Irvine Water Ranch Water District.
  - The billing cycles are either at the beginning of the month, mid-month, or at the end of the month, and services are being billed either monthly or bi-monthly.

#### **D. Water Summary Details**

##### 1. City of Santa Ana

- Services to District Operations Center, Santa Ana College, Centennial Education Center, and Digital Media Center
- Bills are available online up to 12 months.
- Billing statement is available to download.
- Bills from 2015 to current were downloaded.

##### 2. Irvine Ranch Water District

- Services to Orange County Regional Sheriff's Regional Training Academy
- Bills available online for 13 months.
- Billing statement is available to download.
- Bills from 2015 to current were downloaded.

##### 3. City of Orange

- Services to Santiago Canyon College and Orange Education Center
- Bills are available online for 8 months.
- Billing statement is available to download.
- Bills from 2015 to current were downloaded.

Note, all three water utility agencies do not offer the capability to export the water usage history in Microsoft Excel format, all collected data was entered manually into spreadsheets created by the District.

#### **E. Maintaining a Master File**

Water utility data is entered from the billing statements which includes the following:

- Date of Services; beginning date and end date
- Number of days of services
- Meter Read Date; beginning date and end date
- Total CCF (this is the difference between the two meter read dates)
- Total Gallons (the total CCF multiply by 748)
- Daily Average by Gallons
- Charges; various from water agencies, but all the rates and charges were entered.
- Billing Date (the date the billing statement was issued)

## F. Water Trends

For each site it appears that spikes in water usage occur seasonally and when there are irrigation leaks and or other types of plumbing line breaks and repairs occur.

## G. Recommendations to Improve Reporting of the Usage History

Open communication with the campus and District is very important. In order to understand the usage and consumption patterns, all respective parties from the campuses to the District, must communicate with one another to proactively monitor utilities.

1. Campus or other building operators should notify the District when a leak occurs and note the duration.
2. The District office can inform the Colleges of spikes in the water billing statement, which may lead to investigation of unknown irrigation leaks.
3. District logs and tracks events for future reference and provides water use history data.

## H. Implement Water Conservation Strategies

Several water conservation measures have been implemented throughout the District and are included in the Facility Design Standard Guidelines.

### District Office:

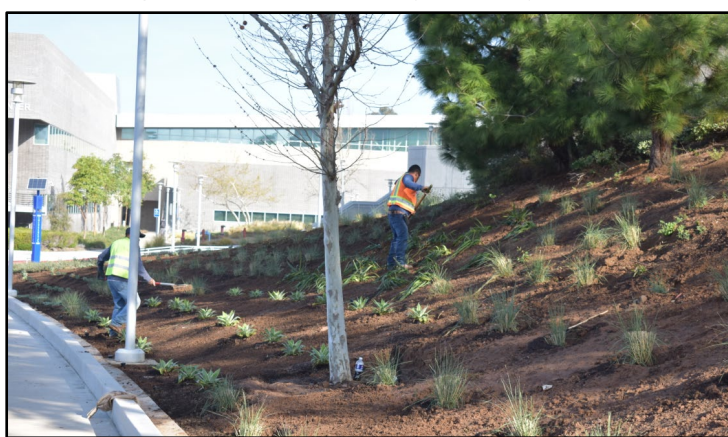
Repaired irrigation system and removed the landscaping material to reduce water usage.

### Santa Ana College:

- Planning and scoping the installation of smart irrigation controls on campus are part of the District's Scheduled Maintenance projects.
- Phase 2 to replace an additional 14 controllers is in planning.
- Additional landscaping and hardscape projects are in planning.

### Santiago Canyon College:

- East Chapman Entry Repairs included planting new California, drought tolerant, native plants that are low maintenance and reduce water consumption as well as to prevent storm water runoff. The existing irrigation leaked and caused soil erosion. All of the irrigation on the entire slope was repaired.



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## I. Reduce Storm Water, Sewer Discharges, and Water Pollution

### Santa Ana College:

- New Science Center and Health Sciences buildings will utilize a shared retention basin to manage storm water runoff.
- New Johnson Center will be tied into the existing campus retention basin to manage storm water runoff.

## J. Adopt Sustainable Landscaping Practices

### Districtwide:

- The District updated and reviewed landscape material design standards in 2020 which includes California native plants, drought resistant, and water-wise landscaping practices.
- All new buildings incorporate the Facility Designs Standards which require low water use plants and, irrigation systems with controllers to reduce and monitor water use.
- All new construction will comply with California Green Building Code.



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## ***NONDISCRIMINATION POLICY***

The Rancho Santiago Community College District is committed to equal opportunity in educational programs, employment, and all access to institutional programs and activities.

The District, and each individual who represents the District, shall provide access to its services, classes, and programs without regard to national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.

The Chancellor shall establish administrative procedures that ensure all members of the college community can present complaints regarding alleged violations of this policy and have their complaints heard in accordance with the Title 5 regulations and those of other agencies that administer state and federal laws regarding nondiscrimination.

No District funds shall ever be used for membership, or for any participation involving financial payment or contribution on behalf of the District or any individual employed by or associated with it, to any private organization whose membership practices are discriminatory on the basis of national origin, religion, age, gender, gender identity, gender expression, race, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or because of his or her association with a person or group with one or more of these actual or perceived characteristics. Inquiries regarding compliance and/or grievance procedures may be directed to District's Title IX Officer and/or Section 504/ADA Coordinator. RSCCD Title IX Officer and Section 504/ADA Coordinator: Jean Estevez, 2323 N. Broadway, Santa Ana, CA 92706, 714-480-7404.