# CSU CHANNEL ISLANDS SUSTAINABILITY REPORT FY 2018-19

Third Quarter

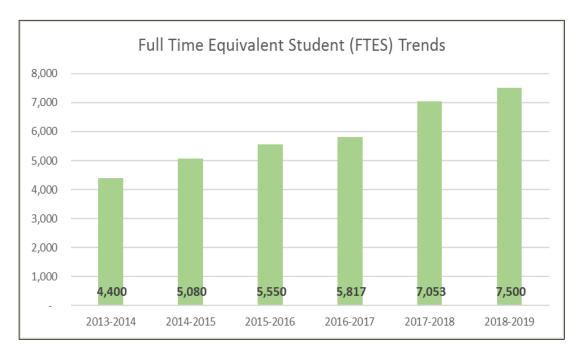
# TABLE OF CONTENTS & IMPORTANT TERMS

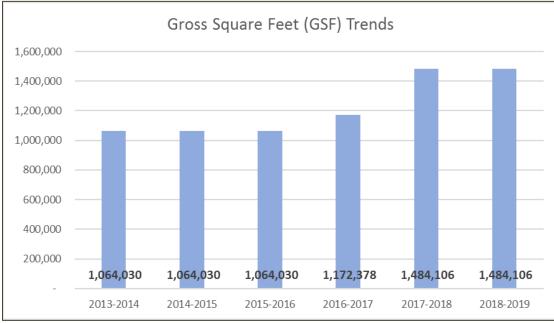
- 3. Exceeding Goals
- 4. Total Water
- 5. Potable Water
- 6. Recycled Water
- 7. Water Conservation Tips
- 8. Electricity
- 9. Total Energy
- 10. Energy Conservation Tips
- 11.Waste
- 12. Waste Reduction Tips
- 13. Sustainability On- and Off-campus
- 18. Acknowledgements

- FTES: Full Time Equivalent Students
- GSF: Gross Square Feet
- HCF: Hundred Cubic Feet
- kWh: kilowatt hour
- BTU: British Thermal Unit
- Potable Water: Drinking water
- Recycled Water: Tertiary-treated waste water
- Baseline: the year, or years, we compare our usage to (for water: 2013, for everything else: average of 2008-2009 FY and 2009-2010 FY)

#### **EXCEEDING GOALS**

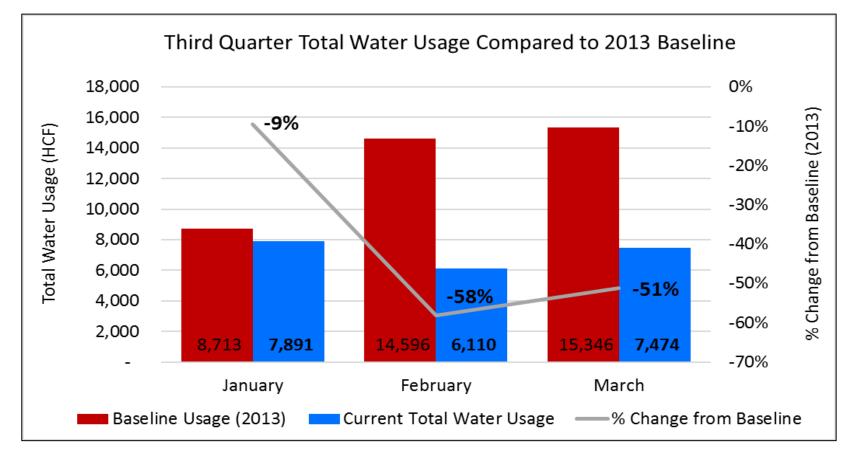
Despite sizeable increases in our campus' square footage and an ever-growing campus community, we continue to decrease our utility usages and meet our sustainability goals every quarter. This is the result of a collective effort made by students, faculty and staff to help prioritize environmental sustainability on campus. If not for the common vision that we all share for a sustainable future here at CSUCI, we would not have been able to consistently exceed our goals to this extent.





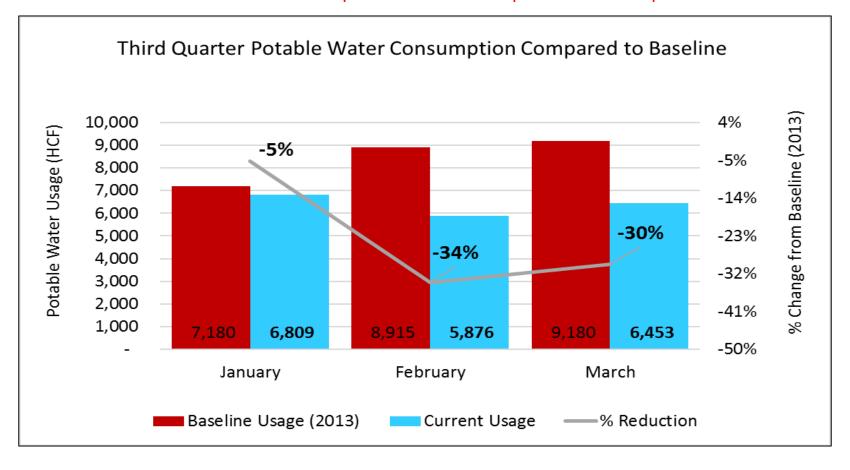
#### TOTAL WATER

Total Water is the combination of both our potable and recycled water usage. The CSU Chancellor's Office has set a reduction goal for total water of 20% by 2020 compared to our 2013 baseline. Variability from month to month can often be attributed to incoming students, local heat waves and increased winds. Collective efforts by our campus community are essential if we are to reach our reduction goals each month. These efforts, in addition to heavy rains and holiday breaks, contributed to a decrease in usage of 51% from our 2013 baseline in March and an overall decrease in usage from January to March.



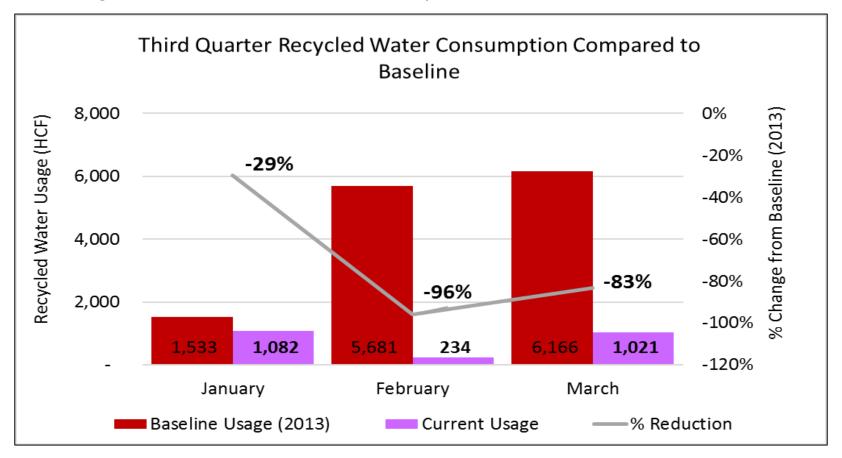
#### POTABLE WATER

We aim to continuously and innovatively promote water-saving practices on campus to reduce our potable water consumption. Seeing that this goal will require efforts made by every member of the campus community, we make education and outreach one of our top priorities. Campus efforts contributed to a decrease in potable water usage of 30% compared to our 2013 baseline in March, along with an overall decrease in usage from January to March. The absence of students and faculty during winter and spring breaks could have resulted in decreases in potable water consumption in the third quarter.



#### RECYCLED WATER

Reductions in our recycled water usage are accounted for in our total water goal. We achieve our goals by utilizing improved irrigation management systems, metering, planting more drought-tolerant plants, adding mulch, and implementing native landscaping. High variability in usage from month to month depends on factors such as landscaping, irrigation needs, and weather. Low demand for irrigation, as a result of heavy rains throughout the season, contributed to a record-breaking decrease in our recycled water usage from 96% below our baseline in February to 83% below our baseline in March.

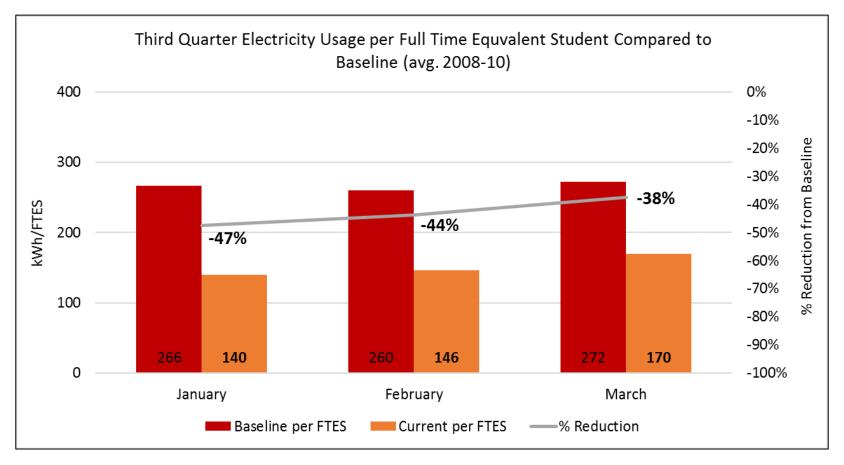


# WATER CONSERVATION TIPS

- Take advantage of native and drought tolerant plants in landscaping and replace irrigated turf with wood chips, rocks or sand.
- If you have a lawn or garden that requires irrigation, program sprinklers to come on at night when evaporation is at its lowest.
- Be extremely conservative at the tap whether you're doing dishes, thawing meat, washing hands or brushing your teeth; if its not in use, it should be off. Every drop counts!
- Fix any leaks in water infrastructure immediately that water adds up. Notify the proper authorities if the leak is not on your property. Never assume someone else is already taking care of it.
- Consider that food waste is also water waste. Approximately 80% of California's water goes to agriculture, so buy what you'll eat and compost any waste. Compost bins can be inexpensive, low-maintenance and provide a source of free, organic, nutrient-rich soil amendments.

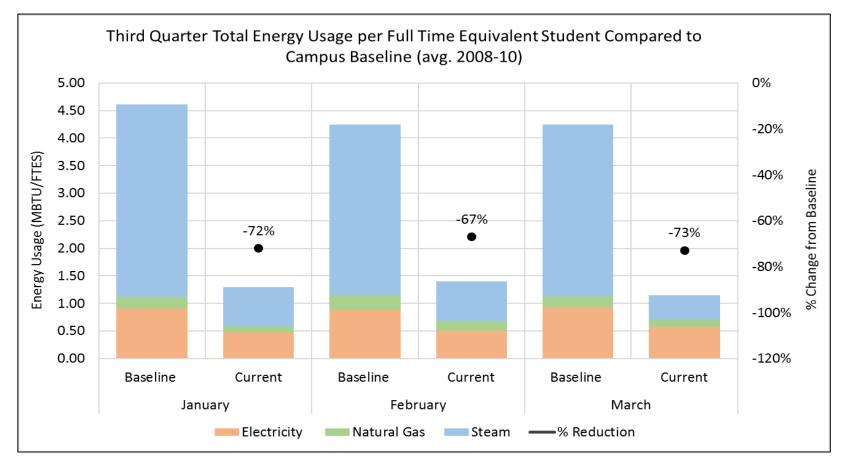
#### **ELECTRICITY**

As the campus grows, our need for more electricity increases. However, as we continue to innovate and utilize more efficient technologies, our overall electricity usage consistently decreases compared to our baseline (average 2008-09 and 2009-10 FY). Our goal (set by the CSU Chancellors Office) of a 25% reduction per FTES versus baseline has been exceeded each month this quarter.



#### TOTAL ENERGY

Total energy is our representation of all sources of energy on our campus, including electricity, steam and natural gas. Steam makes up the most amount of energy because it is used for the majority of heating hot and cold water along with space heating around CI after it's converted at our Central Plant. Electricity is used for lighting, plug loads, and various equipment around campus. Natural gas makes up the smallest amount because only a few buildings use gas for heating hot water, cooking, and space heating. Our goal is a 25% reduction per FTES versus our baseline, which we are exceeding.

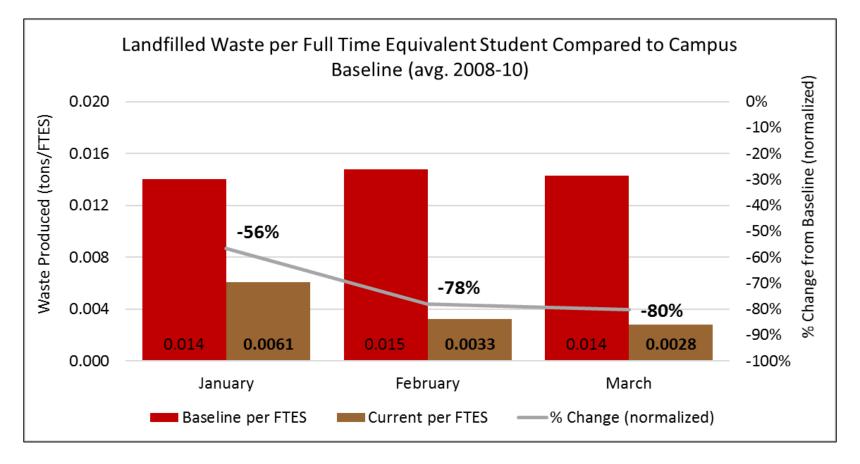


# **ENERGY CONSERVATION TIPS**

- Avoid letting your car idle: an idling car is wasting gas and spewing pollution into the environment.
- Save money, gas, and reduce pollution by carpooling, walking, biking, or using public transportation whenever possible.
- Wear layers and use blankets or fans instead of adjusting the thermostat up or down at home or in the office.
- Make sure to close windows and doors when running air handling units they are ineffective at changing the temperature outside!
- Make it a habit to turn off lights when you leave a room. Utilize natural light whenever possible.
- Wash clothes in cold water it cleans just as well without having to pay to heat it.
- Unplug devices and appliances when not in use.

#### WASTE

The CSU Chancellors Office has set our waste diversion goal at 80% by 2020. While we consistently come very close (or reach it, as we did in March), achieving the last ~10% towards our goal will have to come from a reduction in waste due to contributions from our campus community. These efforts to reduce waste sent to landfills helps to lower methane emissions and minimize chemicals that can leach into our water tables. By recycling, we reduce the energy and raw materials needed to make brand new items like water bottles and other plastics.



# WASTE MANAGEMENT TIPS

- Buying food from local sources reduces the carbon footprint from transport, this can be done at Farmer's Markets or through a CSA box subscription (Ventura County has many options!)
- Purchasing food in bulk helps avoid extra packaging materials, but make sure to use the product before it expires.
- Take advantage of reusable items: water bottles, coffee mugs, canvas grocery bags, Tupperware, scrap paper, batteries (rechargeable), packaging materials be creative and instill new life into materials you paid for!
- Rinse out sauce jars instead of buying mason jars, plant seeds in rinsed yogurt cups, shred last semesters notes for hamster bedding. See materials not as they are, but for what they could be!
- Know what is recyclable and where to take it. Bring electronics to ewaste centers and compost food scraps to make your own soil.
- Avoid buying items in non-recyclable thin plastic films.

### SUSTAINABILITY ON CAMPUS

In February, FS Sustainability hosted the Green Technology class from Oxnard High School by leading tours of our "green" buildings here on campus - our LEED compliant building Sierra Hall and our LEED Gold certified building Santa Rosa Village.



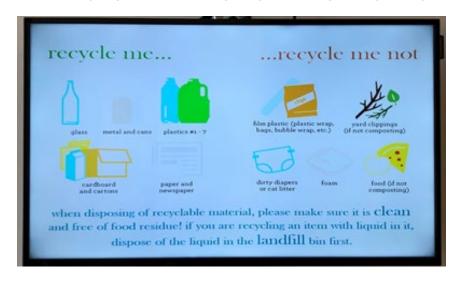


During the tours, Sustainability and Operations Analyst Lisa Noriega detailed several features of each building that qualified it to be LEED certified or compliant. The students took notes of these sustainable building features and used them to build physical models of 'green' buildings back in their classroom.

### SUSTAINABILITY ON CAMPUS

This quarter, in an effort to reduce contamination in our recycling bins on campus, our Green Screens in Del Norte and Bell Tower featured an educational infographic about proper recycling etiquette.





As bin contamination could lead to significant charges on our waste bills, education about proper recycling is vital in helping our campus save money on our utility bills while simultaneously promoting sustainability literacy in our campus community.

# SUSTAINABILITY ON CAMPUS

In March, five new recycling bins were placed in dining locations around campus, including inside and outside of the Town Center Market, Pizza 3.14, and the Student Union Building (SUB). Prior to these additions, there had been minimal (or zero) recycling receptacles in these locations.









Student Union Building

Town Center Market

Pizza 3.14

These additions will allow for more recyclable items to be disposed of properly rather than to be placed in a landfill bin on account of a lack of available recycling receptacles. This may also help us to increase our landfill-to-recycle diversion rate.

# SUSTAINABILITY OFF CAMPUS

Sustainability and Operations Analyst Lisa Noriega assisted ESRM Professor Linda O'Hirok on a field trip to Owens Valley to help educate students about water sourcing, usage and management in southern California.



Southern California Edison's Rush Creek hydroelectric plant



Students learn about the usage history of Owen's Lake





A water resource specialist gives a talk at the Los Angeles Aqueduct (Alabama Gates)

Activities included a tour of a Southern California Edison (SCE) hydroelectric plant and educational talks about where the greater Los Angeles area (including CSUCI) gets its water from, both currently and historically.

# SUSTAINABILITY OFF CAMPUS

FS Sustainability at CSU Channel Islands was represented at the annual 'This Way to Sustainability' Conference held by CSU Chico in late March.











The conference hosted several environmental speakers and had representation from all CSU campuses' Sustainability staff and students. It provided a platform to share ideas about effective (and ineffective) ways to advance sustainability efforts within the CSU system.

### **ACKNOWLEDGEMENTS**

CSU Channel Islands is striving for a more sustainable campus community every day.

Keep up to date between reports on our website: http://www.csuci.edu/fs/sustainability/index.htm

For questions, concerns, or ideas on new sustainability efforts, please email lisa.noriega403@csuci.edu.

Appreciation goes out to the following contributors:

- The Department of Facilities Services
- Wes Cooper, Senior Director of Facilities Services
- Tom Hunt, Assistant Vice President for Facilities Services
  - Lisa Noriega, Sustainability and Operations Analyst
    - Dr. Linda O'Hirok, ESRM Lecturer AY
    - Sycora Powell, Sustainability Student Assistant
- Jan Quilantang, Oxnard High School Teacher (Green Technologies Academy)
  - UAS Dining Services