



**CSU Channel Islands  
Sustainability Annual Report  
Fiscal Year 2015-16**



# Table of Contents



CSU Channel Islands Facilities Services  
Mission Statement



Water



Electricity



Landfill and Recycle



Student Involvement



Awards



Project Highlights



Outreach



Acknowledgments



# CSU Channel Islands Facilities Services



## Mission Statement

Facilities Services (FS) supports CI stakeholders by providing highest quality service by practicing excellent workmanship, exhibiting forward vision, using resources effectively and efficiently, and continuously improving the quality of service. FS provides support for the entire campus through Facilities Support, Operations, Maintenance Stores, Work Control Center, and Planning, Design and Construction. Our core values are excellence in service, value our team members, continuous improvement, customer service and sustainable performance.

The main focus of Facilities Services to incorporate sustainability on campus involves:

- Energy Conservation
- Water Conservation
- Waste Minimization and Landfill Diversion
- Greenhouse Gas monitoring and minimization

We also assist other entities and departments in their efforts by providing support for:

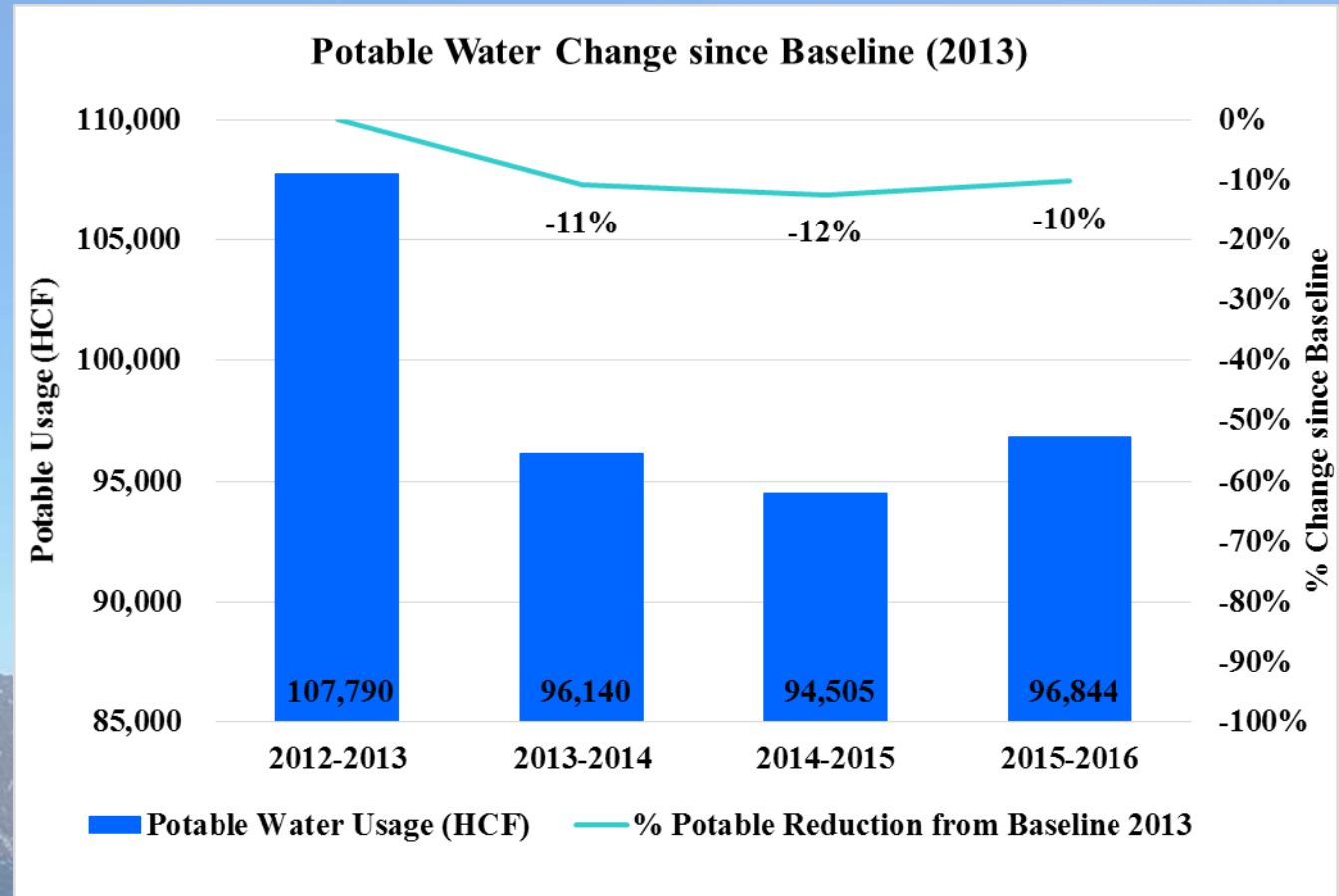
- Dining Services
- Transportation
- University Glen / Site Authority
- Channel Islands Power (co-gen)
- Housing and Residential Education

*Anacapa Island, Channel Islands  
National Park*

# Potable Water



Potable water is used for drinking, cooking, washing, showering, and other human consumption; we measure it in Hundred Cubic Feet (HCF). There are 748 gallons in one HCF. CI was required to reduce our potable usage by 32% compared to 2013 as mandated by the state. Any increase in our water usage due to campus expansion from less than 6,000 students currently, eventually to 15,000, must be minimized.





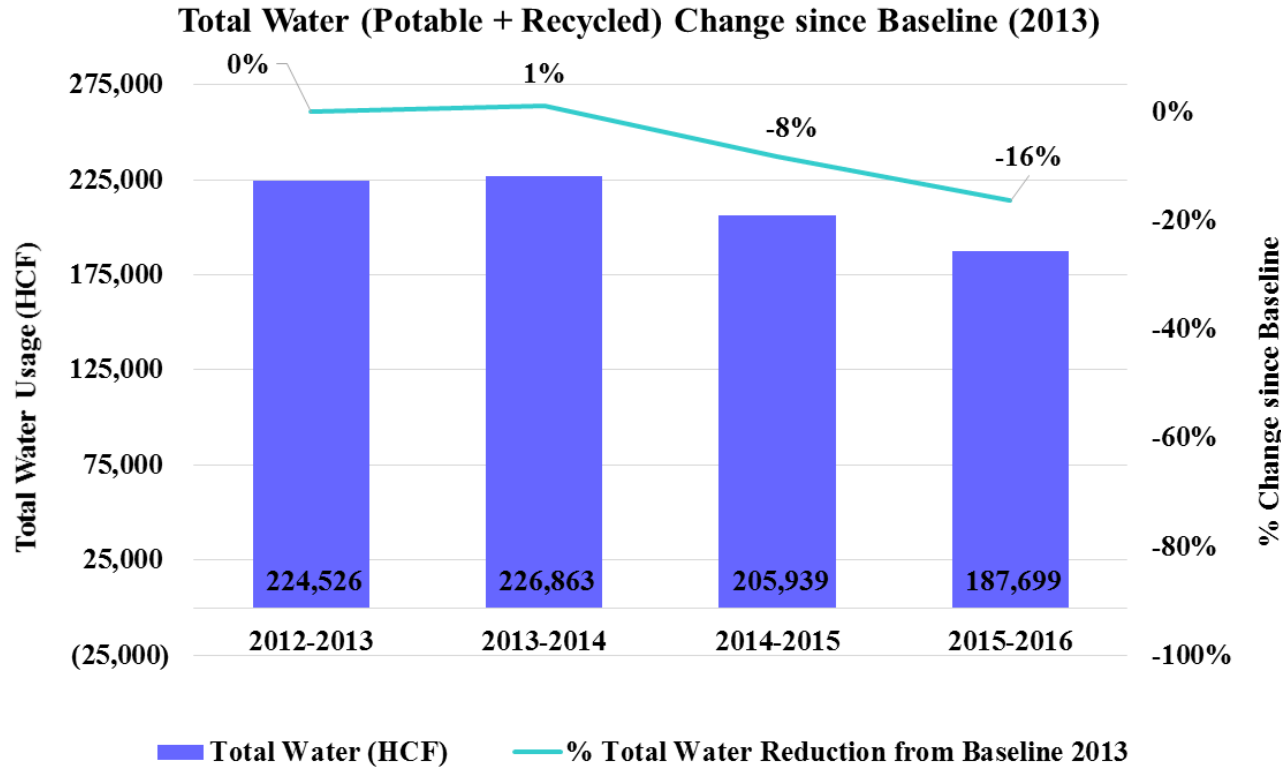
# Total Water



Total water is all potable and recycled water used on campus that we get from Camrosa Water District. Recycled water is water that has been reprocessed for irrigation and other non-consumption purposes.

The CSU Chancellor's Office has set our reduction goals versus 2013 to:

- 10% by 2016
- 25% by 2020



*Santa Rosa Island, Channel Islands National Park*



# Total Water Cont.



So far we have exceeded our Chancellor's Office 2016 goal! This was accomplished with help from everyone on campus who made an effort to reduce water use.

## Quick water conservation tips:

- Limit your shower to 5 minutes
- Fix any leaking sinks or toilets; if you are in housing, simply place a work order
- When you are washing your hands, turn off the water while lathering
- Only use your dishwasher when it is completely full
- If you live on campus, or are in any state-supported building, simply place a work order request with Facilities Services work center at [fsworkcenter@csuci.edu](mailto:fsworkcenter@csuci.edu).

## CSU Channel Islands has reduced water use by:

- Shutting down the fountains on campus
- Using only recycled water for irrigation
- Installing low-flow aerators on sinks and replacing toilets with low flow models
- Utilizing smart link irrigation systems

## Additional plans for conservation include:

- Constructing Santa Rosa Village to allow recycled water for flushing toilets
- Switching the cooling tower from potable to recycled water

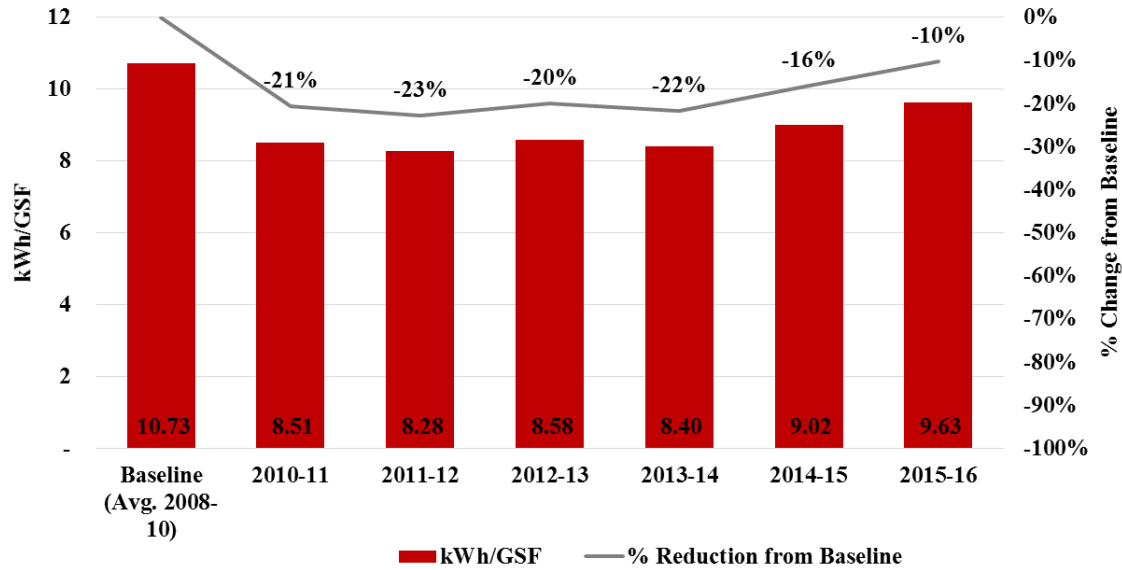
*San Miguel Island, Channel Islands  
National Park*



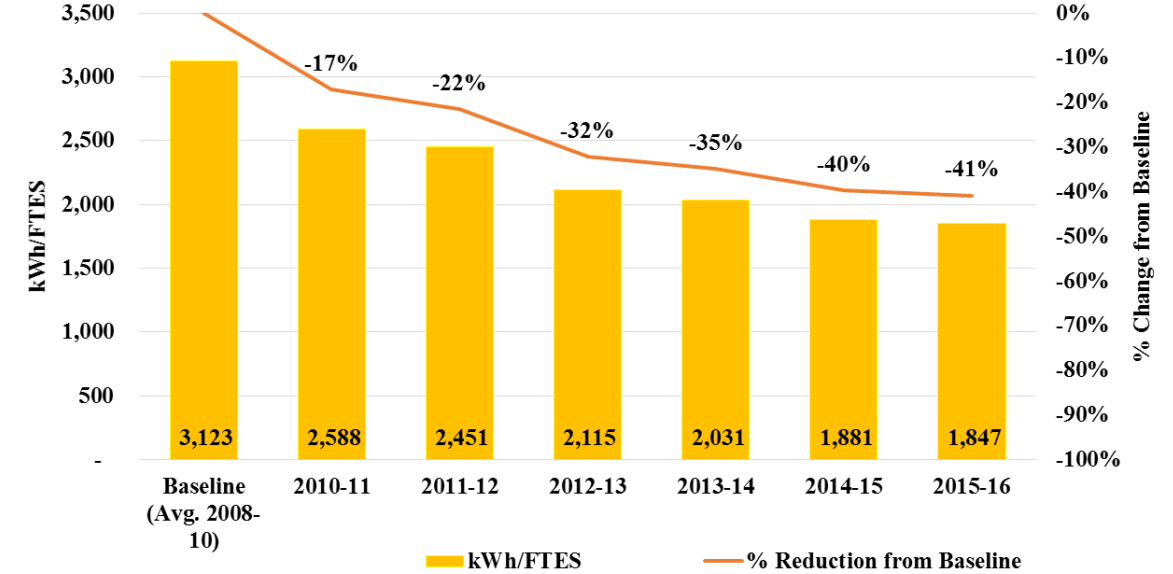
# Electricity



Electricity Usage - kiloWatthours per Gross Square Feet



Electricity Usage - kiloWatthours per Full Time Equivalent Students



On a per square foot basis, we continue using less electricity than we did compared to our baseline. Construction of new, efficient facilities helps our conservation efforts tremendously!

Over the past five years, we have been on a steady downward slope in our electricity usage per full time equivalent student. Even though our campus population is growing, the energy used per student is decreasing!

CSU Channel Islands uses a baseline from 2008 usage. From this baseline, we need to reduce electricity usage by 25%.

# Electricity Cont.



On a per student basis, our electricity consumption has stayed on a reduction path, but because our campus is growing (such as this year with the addition of Sierra Hall) it is likely that our total electricity use will increase. With that in mind, we need to continue conserving while seeking additional efficient technologies and practices to implement on campus.



Channel Islands has reduced electricity and energy use by:

- Upgrading exterior and interior lighting with more efficient LED or CFL bulbs
- Retrofitting parking lot light fixtures
- Upgrading air handling units.

## Conservation Tips

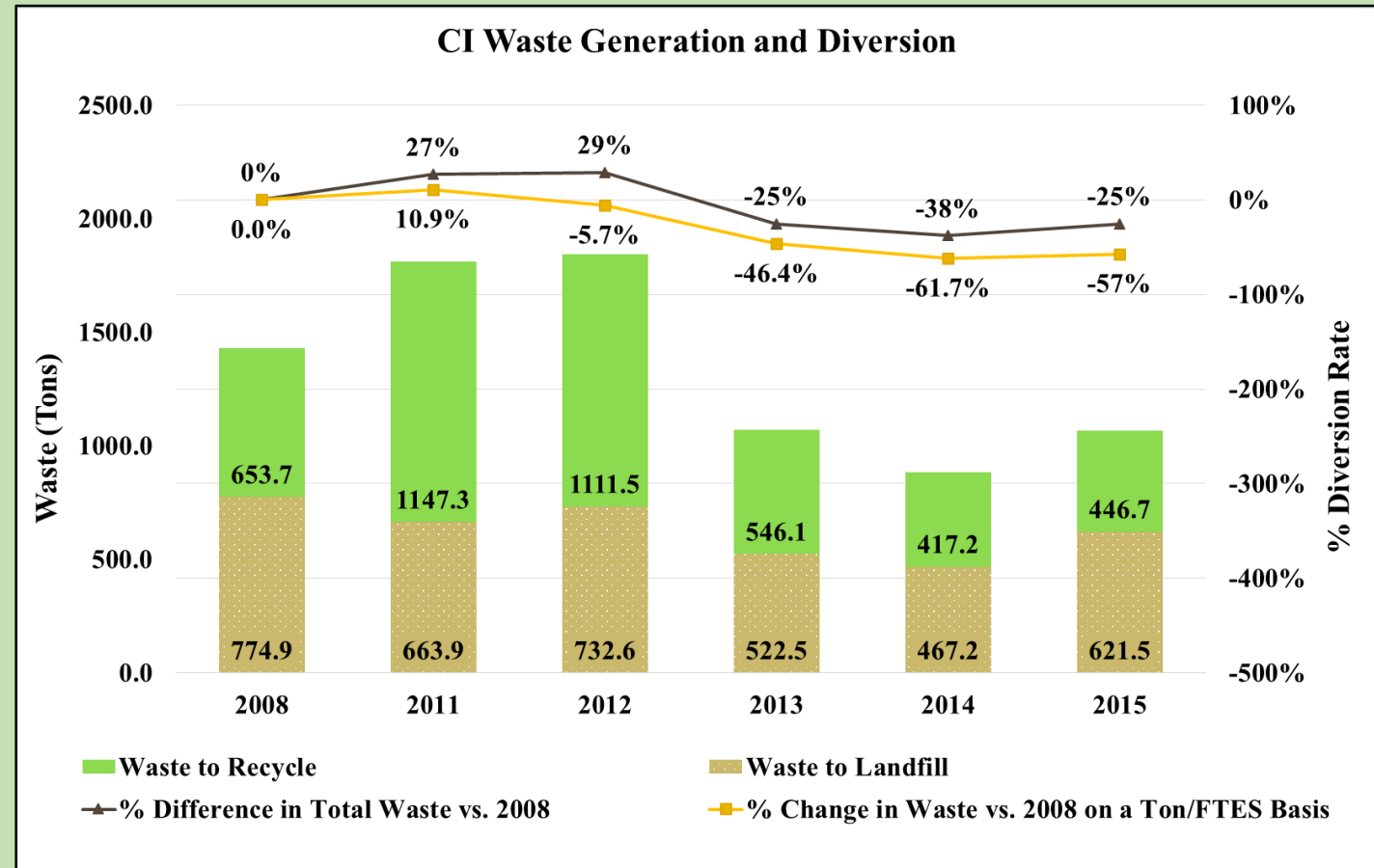
- During class, if the temperature outside is warmer than inside, keep the windows shut so the A/C doesn't have to work excessively
- Turn off lights and unplug appliances when not in use
- Use shades to keep your home cooler
- Turn off fans when leaving a room; fans cool people, not rooms.



Our waste goal as set by the Chancellor's Office is to reduce solid waste disposal by 50% compared 2008. Even with almost twice the number of students (and supporting faculty and staff) than we had then, the efforts made by the community are continuing the decreasing trend in waste generation on both an absolute and per student basis.



# Landfill and Recycling





# Student Involvement



Students are constantly doing their part to reduce plastic water bottle use by using reusable water bottles and refilling at one of our 33 water refill stations. The refill stations were put into place after a student group started the initiative in 2013 which has developed into a collaboration between Academic Affairs, Student Affairs, and Facilities Services to fund the installation of the stations. They have helped avoid use of over one million plastic bottles!



This year, the CI community gathered volunteers to plant trees along the University Drive entrance to campus and in the restoration site of Long Grade Creek. With direction from Facilities Services' Grounds Workers, a mixture of 76 Western Redbuds, Ironwoods, and Sycamores were carefully placed in hopes of successful growth.







# Awards

The Arbor Day Foundation's Tree Campus USA has recognized Channel Islands for the 4<sup>th</sup> year in a row. This acknowledges the campus's commitment to maintaining an environment enhanced by beautiful, healthy trees. CI has a tree advisory committee and a certified arborist, tree care program with dedicated annual expenditures, and has observed Arbor Day celebrations while incorporating student involvement with service learning projects.

*Sierra Club* published a list of 153 “Cool Schools” based on most recent submissions to the Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking and Reporting System. Channel Islands was ranked #46 among some very sustainably-performing schools!





# Project Highlights



Bell Tower Courtyard



Central Mall



## Fountain Shutdown

After 2016 Commencement, the fountains on campus were turned off and drained in response to the drought. Having them off means they do not call for makeup water due to evaporation and splashing, and they do not require regular cleaning, which involves dumping roughly 5,000 gallons from the Central Mall fountain alone! (Water drained from the fountains was used to water surrounding landscape.)



Aliso Courtyard



Signs placed on fountains



# Project Highlights (cont.)



## Landscape Irrigation Conservation

Grass has been removed and replaced with drought tolerant plants around the North and South Quads. It helps reduce the amount of recycled water being used to irrigate the landscaping on campus. This is saving us almost three-quarters of a million gallons of recycled water a year!

Additionally, the Grounds Department cut down watering on campus in general which has reduced campus recycled water use by almost 30 million gallons over the past year. And by upgrading University Glen's irrigation system, we hope to see even more reductions!



November 2015

## Wall Packs Upgrades

Over the past 2 1/2 years outdated exterior lighting has been upgraded to LEDs with the help of incentives from Southern California Edison. These projects will save us about 200,000 kWh per year; that's about \$23,200 saved each year!

## KPI Scorecard

Facilities Services Sustainability recently established a Key Performance Indicator (KPI) report to monitor if we are staying on track with our department's expectations. Some of the key indicators include maintaining our website with accurate information and putting reports out in a timely matter after receiving data.



July 2016



# Project Highlights (cont.)



## University Glen Meters

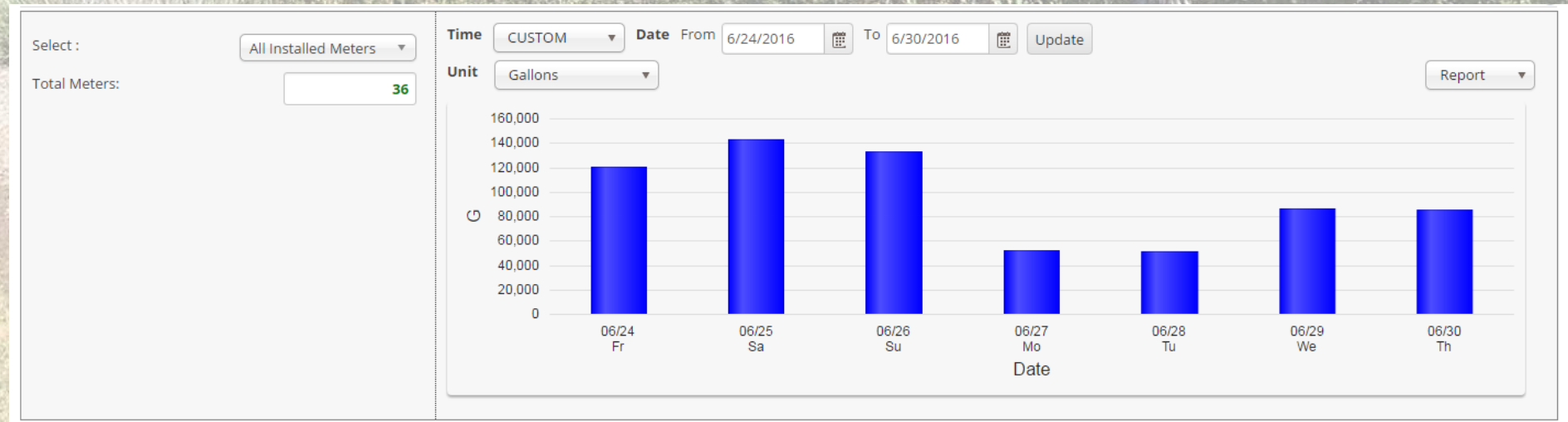
University Glen is an area on east campus that contains housing available to the public for purchase or rent year round. Though it is not exclusively students, Facilities Services is responsible for oversight of their water use. Meters have been installed on the apartment buildings to help monitor water usage.



Meter register before installation

## WaterScope

Courtesy of a new system, information from the water meters installed all around campus is now sent to a database and is accessible through a website called WaterScope, the homepage is shown below. This allows us to see data in five-minute intervals for all the buildings that have these meters. By using this database we may be able to identify and locate leaks and fix them more quickly than before.





# Outreach

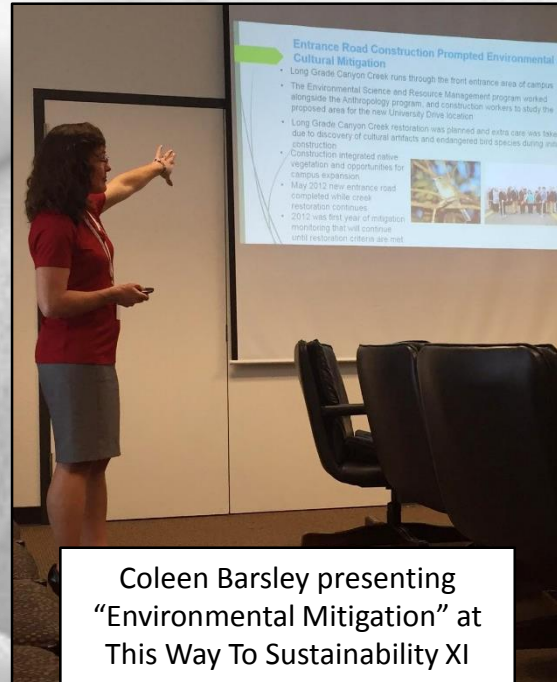


## This Way To Sustainability XI

On March 24 – 25, 2016, at CSU Chico, Facilities Services Sustainability and Operations Analyst Coleen Barsley presented two topics. The first was how CSU Channel Islands is working towards reducing water usage by “Slicing the Water Conservation Pie”. The second presentation, “Environmental Mitigation”, explained how Channel Islands is restoring Long Grade Creek and covered other topics such as native vegetation on campus. Three students attended as well in order to bring back even more information from this conference to integrate on our campus.

## CHESC

CSUCI Sustainability staff presented “Slicing the Water Conservation Pie” to further spread the word on how we are conserving water. The California conference was hosted by CSU Fullerton June 26 – 30, 2016. In addition to CI staff, students were sent on behalf of Academic Affairs to also bring back sustainable practices and project ideas.



Coleen Barsley presenting  
“Environmental Mitigation” at  
This Way To Sustainability XI

## AASHE

At the Convention Center in Minneapolis, Minnesota on Oct. 25 - 28, 2015, students and staff from CI attended the national AASHE Convention. Their goals were to gain insight into actions the rest of the country is taking in sustainability, and learn about the new version of the STARS program that AASHE has implemented.

## California Water Summit

Wes Cooper, Senior Director of Facilities Services, and Coleen Barsley collaborated on a presentation about ways recycled water can be used other than for irrigation. The summit, held in Sacramento in early June, was attended by government officials, private investors, and leaders of various industries with water-intensive operations, such as oil extraction and beverage manufacturing.





# Acknowledgments



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, additional information, or ideas on new sustainability efforts, please email [Coleen.Barsley@csuci.edu](mailto:Coleen.Barsley@csuci.edu) or [SustainableCI@csuci.edu](mailto:SustainableCI@csuci.edu).

## Key Developers:

Aspen Coty, Facilities Services Sustainability Student Assistant  
Taylor Malott, Facilities Services Sustainability Student Assistant

## Support:

Coleen Barsley, Sustainability and Operations Analyst  
Grounds Department, Electricians, and all of Facilities Services  
Wesley Cooper, Senior Director of Facilities Services



Channel Islands  
CALIFORNIA STATE UNIVERSITY