Executive Summary

This document gives an overview of CSUN’s progress towards the goals and objectives outlined in CSUN’s Sustainability Plan, 2013-2023. The status of priorities set for this year and additional accomplishments achieved by each working group are reported, and priorities established for the upcoming 2016-17 year.

This was another year of accomplishments in sustainability for CSUN. The University released its Climate Action Plan in January 2016, an ambitious plan to move the campus forward on a path towards zero carbon emissions by 2040. This year also saw the completion of our AASHE (Association for the Advancement of Sustainability in Higher Education) Sustainability Tracking, Assessment & Rating System (STARS), which won a Gold rating. Dining Services completed the Real Food Assessment using a team of students and established a baseline of 7%. Through joint efforts by the Institute for Sustainability, Facilities, and University Advancement the message of sustainability has been spread throughout the campus by way of signage, posters, social media, news stories, events, competitions, website updates and the launch of The Footprint newsletter. Facilities and Physical Plant Management have successfully launched the first Energy Information System in the CSU, which gathers all utility and solar generation data and provides a suite of analytics. The University is shifting to more environmentally friendly products for daily cleaning and operations including 100% recycled toilet paper and EcoLogo products. The Grounds Department removed over 148,000 square feet of grass, replanting with drought-tolerant vegetation which has played an important role in achieving a campus-wide 22% reduction in water consumption. In a move to reduce the use of toxic pesticides, the Dept. also developed and launched a campus-wide Integrated Pest Management Plan. CSUN’s Educational Food Garden and Composting sites continue to flourish and provide educational opportunities, hosting two Professional Development workshops this year and attracting nearly 400 volunteers. The redesigned Sustainable Office Program, hosted by Associated Students, won the Student Sustainability Leadership Best Practice Award at the 2016 California Higher Education Sustainability Conference. This year CSUN received awards from Los Angeles Department of Water and Power for its Electric Vehicle Charging infrastructure and for a Community Partnership grant to conduct education and outreach on energy and water conservation in the community. The campus launched a new Sustainable Materials Management website that tracks waste diversion. CSUN now diverts up to 60% of its waste from the landfill, exceeding the state-mandated diversion rate of 50%.

In 2015-16 President Dianne Harrison committed CSUN to carbon neutrality and resilience by becoming a charter signatory to Second Nature’s Climate Commitment, and has established a task force with the community to achieve these goals. CSUN will further advance sustainability in 2016-17, by adopting the City of Los Angeles’ Sustainability pLAN, increasing healthy and Real Food options in campus dining, developing an interdisciplinary Master’s Degree in Sustainability, beginning the LEED Existing Buildings: Operations and Maintenance evaluation process, developing a campus solar photovoltaic proposal for increasing solar power, piloting a solar-powered grounds shop, developing and implementing a Sustainable Landscape Management Program, increasing the percentage of purchases which are environmentally-preferred, increasing ridership on Metro and other alternative modes of transportation, developing a zero-waste plan and expanding water conservation.

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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>Administration</td>
<td>3</td>
</tr>
<tr>
<td>Dining</td>
<td>5</td>
</tr>
<tr>
<td>Education</td>
<td>7</td>
</tr>
<tr>
<td>Energy &amp; Buildings</td>
<td>9</td>
</tr>
<tr>
<td>Environmental Quality</td>
<td>11</td>
</tr>
<tr>
<td>Organics</td>
<td>13</td>
</tr>
<tr>
<td>Purchasing &amp; Consumption</td>
<td>15</td>
</tr>
<tr>
<td>Transportation</td>
<td>17</td>
</tr>
<tr>
<td>Waste Management</td>
<td>19</td>
</tr>
<tr>
<td>Water</td>
<td>21</td>
</tr>
</tbody>
</table>
Administration

To meet the ambitious objectives set forth in the Sustainability Plan, CSUN will need to create and maintain a culture of sustainable thinking on the campus and invest in a sustainability infrastructure.

Main Strategies

1. Incorporate the objectives defined for sustainability into established campus, division, and program planning processes
2. Improve coordination, infrastructure, data collection and record keeping in support of sustainability efforts
3. Utilize sustainability as a branding opportunity, particularly for recruitment

Objectives for 2023

- Establish a culture of sustainability that is evident in policy and practice across the institution
- Allocate sufficient resources to support sustainability programs
- Coordinate sustainability efforts across campus to reduce resource use, including unification of data and data management
- Establish and promote CSUN as a destination campus for students interested in sustainability

2015-16 Priorities and Outcomes

1. Develop and publish Climate Action Plan
   - CSUN’s Climate Action Plan was completed in January, 2016 and submitted to Second Nature as part of the ACUPCC reporting requirements. It outlines actions to bring the campus to climate neutrality by 2040.
2. Complete AASHE STARS, Sierra Club Cool Schools and Princeton Review reporting
   - CSUN’s STARS submission was completed and the University achieved a Gold rating. This information was shared with Sierra Club for its Cool Schools’ Report and with the Princeton Review.
3. All campus units to incorporate Sustainability into their Annual Plans
   - Sustainability is included in 10 annual plans from colleges, however there are several divisions that do not develop annual plans. Two auxiliaries have sustainability plans including TUC (Sustainability 2.0) and AS.
4. Eliminate non-essential paper processes and create new electronic workflows
   - Several paper processes and documents have been converted to electronic this year, with many more in progress. This is an ongoing process.
5. Expand sustainability literacy efforts to include more signage, posters and social media
   - Signage has been placed throughout campus and housing, including posters and stickers (bathroom and light switches). Social media-based competitions were used to help garner interest in sustainability, share information and engage students.
6. Utility data to be accessible on the sustainability website
   - Utility and building-level data has been uploaded into Advantage Navigator and it is expected that the data should be accessible throughout campus by August 2016.
Other 2015–2016 Highlights

- The Institute for Sustainability launched their biweekly newsletter, The Footprint, which provides information on projects, new programs, student interests, sustainability champions, events and opportunities.
- Sustainability-related articles were published in CSUN Weekly including Earth Fair, DC Solar, and AASHE STARS Rating.
- CSUN won the 2015 Second Nature Climate Leadership Award Video Competition.

2016–17 Priorities

1. Investigate STARS Trademark credits
2. Overhaul division planning process and add sustainability reporting
3. Adopt City of LA Sustainability Plan
4. Develop a committee on Investor Responsibility
5. Investigate possible solutions for electronic/digital signatures on liability, field trip, internship, and other commonly used forms
6. Coordinate sustainability-related outreach through social media efforts and/or portal notifications
Dining Services

CSUN’s goal is to provide sustainable food choices that are healthy and delicious in its on campus food service locations.

Main Strategies

1. Increase sustainable campus food sources
2. Increase the availability of fresh, healthy vegetarian/vegan options on campus
3. Provide nutrition and sustainability information for foods from campus food services

Objectives for 2023

1. Expand sourcing of sustainable foods
2. Expand the selection of healthy foods
3. Provide nutrition and sustainability information for foods from campus food services

CSUN Dining and Marilyn Magaram Center teaming up at the Farmers Market Food Demo—Photo courtesy of Karina Ward
2015-16 Priorities and Outcomes

1. Complete REAL Food Challenge initial assessment
   * Establish percent of REAL food baseline and work towards a 20% goal
     * The University Corporation, using their student “Real Food Calculator” team was able to evaluate their purchases in all their dining locations including all Freudian Sips, the Mercado Convenience Store, Orange Grove Bistro, Arbor Court, Sierra Center, Geronimo’s and the Pub Sports Grill. The baseline for CSUN’s Real Food is 7%.

2. Increase attendance and purchases at the Farmers Market
   * There is currently no mechanism in place to track purchases at the Farmers Market but improvements have been made to sustain interest and participation. The University Corporation is now offering healthy food demos made with produce from the Market, and fresh produce stands have been relocated to a more centralized location to increase visibility.

3. Provide improved healthy dining marketing, food labeling and healthy food guidelines
   * TUC is working with the Klotz Student Health Center and the Marilyn Magaram Center to develop signage on how to adjust meals to meet dietary needs as well as how to make meals healthier. The signs are scheduled to roll out in Fall 2016.

4. Explore sustainable food vendors and evaluate opportunities of the purchasing power through local CSUs
   * Students from the “Real Food Calculator” team are researching alternative products that would increase the percentage of real foods purchased.

Additional Highlights 2015-16

- The University Corporation has partnered with The Food Recovery Network to donate uneaten food to local people in need. Over 2,000 pounds of food was donated this year.
- The University Corporation released a Healthy Dining Guide to help the campus community make healthier choices at on-campus dining locations.
- The campus successfully worked with Farmers Market vendors to eliminate the use of Styrofoam at this event.
- Pre-consumer food waste collection was expanded to include four additional CSUN Dining locations and one additional coffee shop. The food waste is processed into compost by students at the CSUN Compost site and used to grow produce at the Educational Food Garden.

Priorities for 2016-17

1. Increase percentage of Real Food purchases
2. Increase ratio of sustainably produced vs. traditionally produced animal products
3. Expand post consumer composting operations
4. Develop Healthy Choice options at each dining location
5. Assess vending machines and develop suggestions for improvements of healthy options
Education
CSUN strives to reduce its own footprint on the environment and to educate its students and the broader campus population on sustainable practices.

Main Strategies
1. Expand education on sustainability principles and practices to entire campus population
2. Increase formal educational offerings in sustainability
3. Increase opportunities for hands-on student learning in sustainability
4. Increase research opportunities in sustainability

Objectives for 2023
- Participation in a sustainability office program by all campus offices/units by 2015
- Implement university-wide sustainability education for all students by 2018
- Offer M.A. Degree in Sustainability Practices by 2018
- Expand service learning and internship opportunities in sustainability
- Expand network of faculty engaging in sustainability-related research

GRID Alternatives volunteers at Earth Fair – Photo courtesy of David Hawkins
2015–16 Priorities and Outcomes

1. Develop and distribute cohesive campus-wide sustainability signage
   * Signage has been distributed throughout campus including A-frame posters and stickers. This is an ongoing effort that will continue to expand.
2. Publish results of Student Sustainability Knowledge Assessment
   * The results of the Student Sustainability Knowledge Assessment have been published in conference proceedings for AASHE and This Way To Sustainability at Chico State.
3. Develop a strategy to assess and improve staff and faculty sustainability literacy
   * Staff and faculty are being engaged through New Employee Welcome Orientations and employee Professional Development workshops.
4. Develop new interdisciplinary Master’s Degree in Sustainability Practices
   * This is still in progress and remains a priority for the university.
5. Participation in the Sustainable Office Program by all units
   * Thirty-one offices have participated this year with an additional thirty-four offices in progress. The student team has recently re-designed their outreach and survey based on their experiences and are expanding the program to more offices.

Other 2015–2016 Highlights

- Sustainability was featured in the New Student Orientation and is now a regular feature of the New Employee Welcome Orientation (NEWO) hosted by Human Resources.
- The Institute for Sustainability has partnered with GRID Alternatives, a non-profit organization that offers no-cost solar panels to low income families, to expand access to solar for disadvantaged communities.
- The Institute for Sustainability received a Community Partnership grant from LADWP to provide education and outreach on energy and water conservation in the city of Los Angeles. They are conducting a series of community workshops focusing energy and water conservation: outreach to local business owners regarding their energy and water use and recommendations for conservation and rebates; STEM education to K-12 schools in partnership with the College of Education; and social media outreach.
- The Institute for Sustainability hosted several events including Water Day, Sustainability Day, an Orange Pick, a Porter Ranch Town Hall meeting, and Glacial Balance film screening. Sustainability Minor Student Social, LADWP Earth Day Event

Priorities for 2016–17

1. Pilot an energy dashboard in a campus building
2. Promote World Food Day
3. Develop signage and educational materials for the new Sustainability Center
4. Assess the impact of outreach efforts
5. Encourage sustainability-related SLO’s in graduate programs
6. Offer continuing education through Tseng College that addresses sustainability
7. Explore the use of alternative media for outreach and engagement
8. Gain curriculum approval for new Sustainability undergraduate course offerings
9. Develop an interdisciplinary Master’s Degree in Sustainability Practices

Students learning about energy and water efficiency – Photo courtesy of David Hawkins
Energy & Buildings

Reduction in energy use and in the use of fossil fuels are core components of CSUN’s commitment to sustainability. These reductions can be achieved in three ways – by conservation, efficiencies, and use of renewables. The proposed plan puts a priority on those actions that will lead to conservation and efficiency savings.

Main Strategies

1. Improve means to measure, report and communicate energy consumption at a building/unit level
2. Improve physical infrastructure to save energy through efficiency and conservation measures
3. Increase energy-related education and outreach to students, faculty and staff, and implement program to change behavior
4. Increase energy supplied from renewable and clean sources
5. Establish and implement strict building standards for new construction

Objectives for 2023

• All buildings to be individually metered for gas, (water) and electricity
• Retro-commissioning to be completed on all buildings by 2023
• Real-time and historical energy use available online to all campus community by 2018
• Reduction in energy intensity (energy/sq. ft.) of 15% by 2018 and 25% by 2023 over 2012
• Generate 20% on-site by 2018, with 25% on-site generation by 2023
• Increase investment in renewable energy: 10% from renewables by 2023
• All new buildings to meet LEED Gold or higher standard effective 2013
2015-16 Priorities and Outcomes

1. Meter ten additional buildings for electricity usage
   - CSUN has installed 22 electric sub-meters and will install an additional 10 during summer, 2016.

2. Install building-level electric meters in the USU and Student Housing
   - USU is now being metered through Substation A and information integrated into our Energy Information System. Student Housing is metered throughout, but data is not integrated because these are not “smart”.

3. Develop utility dashboards that are accessible online or via monitors in building lobbies
   - Campus utility data is now accessible through Siemens Advantage and web accessible dashboards have been created.

4. Complete Strategic Energy Plan
   - The Strategic Energy Plan was completed and identifies energy conservation measures that can be taken for greater efficiency.

5. Install 100 LED retrofit street and walkway lights
   - PPM’s Electric Shop installed 208 LED walkway and streetlights this year.

6. Install lighting controls in two campus buildings
   - This project is now being included into a campus-wide lighting upgrade project. The RFP is being developed, which will allow the campus to upgrade lighting systems more quickly and at no upfront cost to the University.

7. Investigate new renewable energy opportunities through Bloom Energy and Panasonic Solar
   - Upon further investigation, Bloom Energy is not being pursued due to the carbon emissions which are not consistent with the University’s Climate Action Plan. Panasonic will be able to bid on solar installation once the RFP is issued.

8. Involve faculty and students in work to improve building energy performance
   - Facilities received a $26,300 Campus As a Living Lab grant from the Chancellor’s Office, which was used to redesign civil engineering courses to model building energy consumption and improvement opportunities.

9. Establish connection between the Energy Management System (EMS) and Event Management (room scheduling) System (EMS)
   - Project is underway with piloting expected in summer 2016.

10. Complete study on savings from classroom scheduling consolidation
    - Project is awaiting EMS to EMS connection.

Other 2015-2016 Highlights

- CSUN was the first CSU to partner with DC Solar Freedom and received 39 mobile solar powered energy storage units.
- P2S Engineering developed a Solar Feasibility Study for the campus to evaluate potential solar projects on campus.
- Facilities launched the university’s Energy Information System that captures building level data and utility data, and automates the generation of the Monthly Energy Report.

Priorities for 2016-17

1. LEED EBOM Evaluation
2. Develop Lighting and Controls RFP and rollout through one campus building
3. Develop list of all metering items and create a maintenance schedule
4. Bookstore HVAC replacement and upgrades
5. LED retrofits and occupancy sensors in USU
6. Begin phase 1 of HVAC unit replacement
7. Develop plan for outside air modulating dampers
8. Develop plan for Variable Frequency Drive (VFD) upgrades
9. Develop Solar RFP
10. Begin exterior lighting retrofits at Sierra Center
Environmental Quality

Factors contributing towards environmental quality include the use of chemicals and hazardous materials. It is important that the University works toward reducing the use of these products and continues to ensure their proper disposal.

Main Strategies

1. Reduce use of hazardous materials and ensure proper disposal
2. Increase awareness of issues related to hazardous materials

Objectives for 2023

- Study effectiveness of organic fertilizers and reduce the use of synthetic fertilizers
- Phase in more Green Seal-certified cleaning products and adopt green cleaning procedures.
- Develop a set of sustainable operations and maintenance standards
- Complete the campus inventory of chemicals and hazardous materials

New Solution Stations in custodial closets reduce chemical use and use green cleaning mixtures where possible – Photo courtesy of Waxie
2015-16 Priorities and Outcomes

1. Develop, conduct training and launch a campus-wide Green Cleaning Program.
   * The University has made several changes to the items purchased for Custodial Services including environmentally-friendly hand soap and chemicals for the mixing stations as well as shifting to 100% recycled content toilet paper.

2. Evaluate the feasibility of adopting LEED EBOM for campus operational standards.
   * LEED EBOM was evaluated for its potential adoption. A LEED EBOM feasibility study has been set as a priority for next year.

3. Investigate the potential to reuse chemicals on campus to reduce waste.
   * Based on Environmental Health and Safety observations of hazardous waste disposal there is little volume of “virgin” materials being disposed.

Other 2015-2016 Highlights

- PPM’s Grounds Department developed and launched their Integrated Pest Management Plan in 2016.
- PPM has begun transitioning to environmentally friendly products in anticipation of launching a Green Cleaning Program.
- E-waste and other Asset Management items are now being tracked using the CSUN waste tracking website.
- As CSUN renews and updates its waste hauling contract the University will have access to the compost generated off-site from the on-site organic material hauled away. This will be used as organic fertilizer for the campus grounds.

Priorities for 2016-17

1. PPM Grounds Shop to test electrical/battery powered equipment
2. Launch campus-wide Green Cleaning program and develop signage for the program
3. Pilot solar-powered Grounds Shop (carts and equipment)
4. Pilot biodiesel mower system
Organics

CSUN has an important role to play as an educator and responsible party in the efforts to reduce the quantity of food waste produced and the shipment of organic waste off campus.

Main Strategies

1. Reduce quantity of organic waste
2. Educate students and the campus community about food waste
3. Continue to develop the CSUN Organic Food Garden as an educational resource
4. Develop and manage campus grounds using sustainability practices

Objectives for 2023

- Reduce quantity of food waste by 15% by 2015 and by 50% by 2023
- Reduce quantity of other green waste by 50% by 2018 and 80% by 2023
- Conduct on-site composting to generate organic fertilizer for use on campus grounds
- Gain recognition as a Tree Campus USA
- Re-use waste vegetable oil
- Fully develop Organic Food Garden which provides educational and research opportunities for students, faculty, staff and the surrounding community.

2015-16 Priorities and Outcomes

1. Expand composting throughout dining facilities
   * Pre-consumer organic waste is being collected from all TUC-operated dining locations and coffee shops. Pre and post-consumer food waste is being collected from the Geronimo’s dining facility in student housing and composted off-site.
2. Pilot a paper towel composting project
   * Due to restrictions on the quantity of organic materials processing facilities in our region can accept: we were unable to pilot this project. The University is now looking at other ways to target our paper towel waste stream.
3. All Freudian Sips on campus to participate in the composting program
   * All Freudian Sip locations are participating in the on-site composting program, including the new location in Student Housing.
4. Update the Campus Tree Inventory
   * The inventory was included as part of a bio-geography course. Students updated data on several sections of campus, and remaining grids will be targeted for the next scheduling of the course.
Priorities for 2016-17

1. Develop a Sustainable Landscape Management Program (SLMP)
2. Begin implementation of SLMP
3. Increase ratio of organic vs inorganic materials used on CSUN Grounds
4. Position Campus to be successful in complying with Assembly Bill No. 1826 Mandatory Commercial Organics Recycling

Other 2015-2016 Highlights

- The bio-geography students who worked to update the tree inventory received 3rd place in the Community Engagement Research and Service Symposium.
- The Campus Food Garden and Compost Site attracted nearly 400 volunteers throughout the year and has been used for two Professional Development Workshops for staff and faculty.
- CSUN’s on-campus compost operation processed over 40,000 pounds of pre-consumer food waste this year.
- Using the compost generated on-site, the Food Garden generated 300+ pounds of butternut squash, 50+ pounds of spaghetti squash, 20+ pounds of potatoes, 50 corn cobs, 60+ heads of lettuce, 50+ onions, 50+ garlic heads, 40+ broccoli crowns, and five varieties of lettuce, two of broccoli, and three different types of potato.
Purchasing & Consumption

CSUN seeks to reduce the significant impacts of its consumption by reducing the amount of total products purchased and increasing sustainable products purchased.

Main Strategies

1. Reduce overall product consumption
2. Increase the use of sustainable products
3. Increased awareness regarding sustainable purchasing and consumption

Objectives for 2023

- Implement campus-wide environmentally-preferred purchasing policy
- Create campus purchasing reduction goal for various product categories based on baseline data to be collected
- Reduce campus copy paper use by an amount to be determined upon consultation with appropriate entities. Proposed reduction goal of 20% by 2015, of 40% by 2020, and of 50% by 2023.

The Associated Students Sustainable Office Program Team – Photo courtesy of Associated Students Marketing
2015-16 Priorities and Outcomes

1. Implement Environmentally Preferred Purchasing Policy (EPPP)
   * The EPPP is implemented and the campus is in the process of establishing baselines for the goals outlined in the new policy.

2. Develop a "Green Purchasing" list through office supply vendor, minimizing the purchase of items that do not meet the criteria
   * The CSU-system changed service providers and the Chancellor’s Office is working with the new system-wide vendor, Staples, to establish a green purchasing list. CSUN will likely adopt and possibly modify this list as needed.

3. Increase awareness and promote Sustainable Office Program
   * The Sustainable Office Program (SOP) was redesigned and relaunched in summer 2015 by Associated Students, and has met with great success. It won the Student Sustainability Leadership Best Practice Award at the 2016 California Higher Education Sustainability Conference.

4. Assess spending on products to determine baseline purchases of office products and paper. Set reduction goals based on analysis
   * The spend report from Staples shows that the University (including Auxiliaries) purchases the following paper: 11% @ 30% recycled content, 5% @ 50% recycled content, 1% @ 100% recycled content with the majority of purchased paper, 83%, being virgin paper. Steps to reduce the purchase of virgin paper will be taken in 2016-17.

Additional Highlights 2015-16

- All computers recommended as standard builds from CSUN's IT department meet the University’s goal of purchasing equipment that is Energy Star and/or Electronic Products Environmental Assessment Tool (EPEAT) rated.

- CSUN’s Purchasing Dept. is working with Staples to evaluate current product purchases and generate useful reports that can be used to track progress on various goals.

- A hard stop on virgin paper purchases is being considered, which would require purchasers to buy only recycled content paper.

Priorities for 2016-17

1. Develop system for tracking EPEAT and Energy Star products purchased/used on campus
2. Increase proportion of green cleaning products purchased
3. Increase the percent of paper purchased with 50%-100% recycled content
4. Increase proportion of green office products purchased
5. Utilize Sustainable Office Program to help implement purchasing priorities

Environmentally Preferred Purchasing Policy is in place and being implemented
Transportation

The University is addressing the adverse consequences of being primarily a commuter campus by investing in policies to reduce commuting, by increasing use of alternative modes of transportation, and by use of alternative energy technology.

Main Strategies

1. Reduce total number of commuting miles
2. Reduce use of single occupancy vehicles for commuting
3. Reduce emissions associated with vehicle use on campus

Objectives for 2023

- Reduce vehicle miles traveled by faculty, staff, and students by 10%
- Increase share of alternatives to single-occupancy vehicles for commuting from 26% to 40%
- Gain recognition as a Bicycle-Friendly University
- Reduce, with a goal of eventual elimination, vehicle use in the campus core
- Reduce average emissions associated with university fleet operations (non-construction/maintenance vehicles) by 50%
- Systematize transport data collection

2015-16 Priorities and Outcomes

1. Analyze and publish results of 2015 commuting survey
   - The commuting survey was completed and published in February 2016 and showed a reduction of 13% in the number of students traveling in single occupancy vehicles.
2. Review and update recommendations from CSUN Bicycle Report, and begin implementation
   - Associated Students (AS) received two CQF grants for bike racks ($40k) and skateboard racks ($15k). 55 Peak bike racks and 10 skateboard racks have been installed throughout campus.
3. Increase carpooling and investigate new ridesharing program options
   - AS launched Zimride in 2016, with the official roll-out scheduled for 2016-17. 300 members have signed up during the soft launch. The ZipCar program currently has six vehicles and may expand in fall 2016.
4. Establish a “Sustainable Transportation” parking location on campus
   - The Sustainable Transportation parking location plan has been developed. Parking and Transportation Services is awaiting funding to implement in the 2016-17 FY.
     - Shared EV charging station parking spots.
     - Designated parking for carpooling, ridesharing, hybrids, high MPG vehicles.
Priorities for 2016–17

1. Increase student ridership of Metro and promote alternative modes of transportation
2. Increase percent of alternatively fueled fleet vehicles
3. Test an EV replacement vehicle for PPM trucks and vans
4. Establish a “Sustainable Transportation” parking location on campus
5. Advertise and promote Zimride and ZipCar programs
6. Offer bicycle education workshops through the new Matador Bike Shop

Other 2015–2016 Highlights

- CSUN hosted two town hall meetings for students, staff, faculty and community members to engage with Metro representatives and elected officials.
- The Associated Students launched CSUN’s first mobile bike shop.
- CSUN received an award from the Los Angeles Department of Water and Power in their new Sustainability Awards Program for its Electric Vehicle charging infrastructure.
- Through the partnership with DC Solar, CSUN was able to add four solar-powered EV charging stations on campus.
- Sustainable transportation options and an electric vehicle were featured at the Earth Fair showing alternative methods for transportation.
Waste Management

Campus waste generation amounts to approximately 70 pounds per person annually. Reduction of CSUN’s waste is necessary to conserve valuable natural resources, reduce environmental pollution and reduce negative social impacts.

Main Strategies

1. Reduction of total waste generated by the campus (including landfill, recycling, and other disposal methods)
2. Increase diversion of waste from landfills
3. Increase awareness of waste, recycling and related issues
4. Improve collection and access of waste related data and information

Objectives for 2023

- Reduction of total waste per capita by 20% over current values
- Diversion of 75% of waste from landfills by 2023
- Expand recycling capability to a wider range of plastics and other materials
2015-16 Priorities and Outcomes

1. Increase the campus diversion rate to at least 50%
   * CSUN has successfully reached and maintained a diversion rate between 57-60%, exceeding the CSU Sustainability Policy goal of 50%.

2. Improve Student Housing Move-Out program to reduce waste
   * Student Housing revamped their move out program in 2015-16 and set up a location where students could bring unwanted items (cleaning supplies, clothes, bikes, etc.) for donation. Students were invited to shop there for items to use. All items left over were donated to a local organization for distribution to the needy.

3. Install additional interior and exterior recycling bins
   * AS Recycling received a Campus Quality Fee (CQF) grant for $68,000 to purchase new multipurpose bins for interior materials collection. The first three buildings to receive these bins will be Chaparral Hall, Juniper Hall and the Oviatt Library.

4. Launch a pilot program to study the effectiveness of removing trashcans from classrooms and installing receptacles in the corridors and lobbies only
   * A pilot program was launched on the first floor of Chaparral Hall to test the effectiveness of new multipurpose bins and bin removal from classrooms in an effort to reduce plastic liner use and waste.

Other 2015-2016 Highlights

- CSUN has launched a new Sustainable Materials Management website that tracks the diversion rate and generated reports based on weight by location/building.
- Athens Services, CSUN's waste hauler, performed two campus-wide waste audits this year at their off-site facility. They found that ~30% of the material landing in trash cans could be recycled. The University will target these materials to move them out of the waste stream.
- Through the efforts of AS Recycling and Physical Plant Management, CSUN participated in Recyclemania and ranked 76th nationwide.
- AS Recycling hosted a successful America Recycles Day event on November 12th. This event had games and other clubs and organizations promoting their sustainable programs.

Priorities for 2016-17

1. Develop a Zero Waste Plan
2. Reduce truck trips for waste hauling services
3. Produce annual waste and materials management report
4. Capture Job Order Contract construction and demolition waste stream and add to CSUN's waste tracking system.
5. Explore adding major capital project waste submittals to CSUN's waste tracking system.
6. Capture shredded paper data and investigate in-house shredding
7. Install waste and recycling signage for all bins and for high waste locations
8. Capture alternative waste streams from PPM and auxiliaries
Water

CSUN is located in a region characterized by an insufficient supply of local water to serve its population. CSUN’s commitment is to be a good steward of water resources, and to conserve wherever possible.

Main Strategies

1. Improve conservation practices and reduce water consumption
2. Improve data collection, management and analysis
3. Increase awareness of water as a valuable resource and educate on water conservation principles

Objectives for 2023

- 15% reduction in water consumption
- Measure, record, and analyze water consumption on a facility level
- Increase awareness of water-related issues by students, faculty, and staff

2015–16 Priorities and Outcomes

1. Reduce water consumption by at least 15% from the 2013 baseline.
   * The University achieved a water conservation reduction of 22%, exceeding the local (LADWP) goal of 16%; this equates to over 55 million gallons saved.

2. Expand drought resiliency through:
   - Removal of an additional 100,000 sq. ft. of turf and convert to drought-tolerant and native vegetation.
     * Successfully removed over 148,000 sq. ft. of grass and replanted using drought-tolerant vegetation.
   - Application of AquaCents hydrogel technology to additional turf locations.
     * Completed applications of AquaCents hydrogel at North Field and Sierra Quad.
   - Investigation of stormwater capture opportunities.
     * A grant application was developed and is pending submission for a stormwater capture project on Lindley Ave.
   - Exploration of reclaimed water use for central plant blowdown and fuel cell operations.
     * A preliminary study was performed to determine if a sewer-scalping water treatment plant on campus would be feasible. At this time the financials of the project make it challenging, but this may change as the cost of water increases.

3. Inventory all existing restroom fixtures to identify opportunities for improvement.
   * All restroom fixtures have been replaced with low-flow units including urinals, toilets and faucets.
Other 2015-2016 Highlights

- CSUN launched its ‘Brown is the New Green’ initiative in which irrigation was turned off on over 190,000 square feet of grass.
- PPM’s Grounds Department continued the implementation of their Irrigation Strike Team and replaced more than 2,000 broken, faulty and/or leaky sprinkler heads.
- The 2-year irrigation upgrade project for all irrigation controllers will be completed in summer 2016.

Priorities for 2016-17

1. Expand drought-tolerant vegetation installations
2. Complete Arbor Court drought-tolerant renovation
3. Complete programming of irrigation controllers to utilize all available variables
4. Continue to implement irrigation strike teams
5. Expand turf removal to additional locations
6. Expand ‘Brown is the New Green’ initiative
7. Application of AquaCents to three more locations
8. Install drip irrigation in Lindley and Etiwanda median strips.
9. Investigate bio-remediation of fuel cell water for the pond
Thank you to all of the Green Core Working Group members for their participation and efforts in making these great achievements possible.

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