WEBER STATE UNIVERSITY CLIMATE ACTION PLAN

PROGRESS REPORT FOR FY 2018 AND 2019

The intent of this report is to clarify and communicate Weber State University's efforts to become carbon neutral and more sustainable. As a signatory to the American College and University President's Climate Commitment, Weber State has committed to achieve carbon neutrality by the year 2050. This is an ambitious goal, but given adequate resources for investment in sustainability and energy reduction, coupled with behavioral and attitudinal changes among students, staff and faculty, it is achievable. This report details progress towards that ultimate strategic goal of carbon neutrality by 2050 and provides an update on progress towards making the campus more sustainable.

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LEADERSHIP STATEMENT

Leadership Statement

Weber State is committed to improving the learning environment in every way. One of those ways is by careful investment in long-term sustainability programs that represent both sound business practices and decisions, but also sensitivity to and actions to support an improved natural environment. We feel that long term sustainability, improving our natural environment, and sound business decisions are not mutually exclusive, but are instead synergistic in making our university more attractive to students, more cost effective overall, and provide the greatest value overall for our financial and human resource investments. We are in this for the long term.

Mark Halverson

Associate Vice President for Facilities & Campus Planning

AWARDS AND ACCOMPLISHMENTS

Awards and Accomplishments

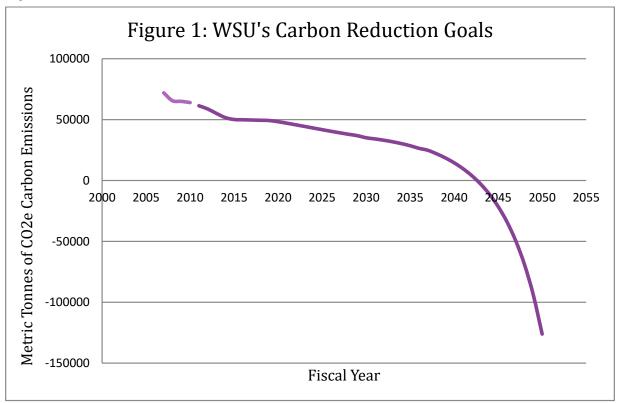
- Again in 2019, Princeton Review selected WSU as one of 413 schools in the U.S. "that
 demonstrate notable commitments to sustainability in their academic offerings, campus
 infrastructure, activities and career preparation." To view WSU's profile in "The Princeton
 Review's Guide to 375 Green Colleges: 2019 Edition" please visit:
 https://www.princetonreview.com/college-rankings/green-guide
- Weber State University was officially listed as one of the 2019 "cool schools" in the USA, according to Sierra Club Magazine. Hundreds of institutions of higher education were surveyed and ranked according to their measurable sustainability goals and accomplishments. All aspects of the campus dynamic, from academic programs to food services, from landscaping to energy-reduction devices, from administrative commitments to collaborations with public agencies and non-profit organizations, were taken into account. Sierra Club's final rankings can be viewed at: https://www.sierraclub.org/sierra/cool-schools-2019-full-ranking
- The Arbor Day Foundation again named Weber State University a Tree Campus USA in 2019 for its commitment to effective community forestry management. WSU achieved the designation by meeting the required five core standards for sustainable campus forestry: a tree advisory committee, a campus tree-care plan, dedicated annual expenditures for its campus tree program, an Arbor Day observance and the sponsorship of student service-learning projects. A full listing of recognized schools can be found at: http://www.arborday.org/programs/treecampususa/campuses.cfm
- Additional sustainability-related accomplishments and news for the fiscal year can be found
 in the Weber Green newsletter available here: http://www.weber.edu/sustainability

Greenhouse Gas (GHG) Emissions

This report contains updated emissions numbers using the Sustainability Indicator Management & Analysis Platform (SIMAP). SIMAP, which is being hosted and managed by the Sustainability Institute at the University of New Hampshire, is the replacement for the Clean Air-Cool Planet Campus Carbon Calculator. With each software update, emissions factors are updated and therefore, there will be some discrepancies when comparing the numbers in this report to the reports of previous fiscal years. For more information about SIMAP please visit: https://unhsimap.org/home

CARBON REDUCTION GOALS

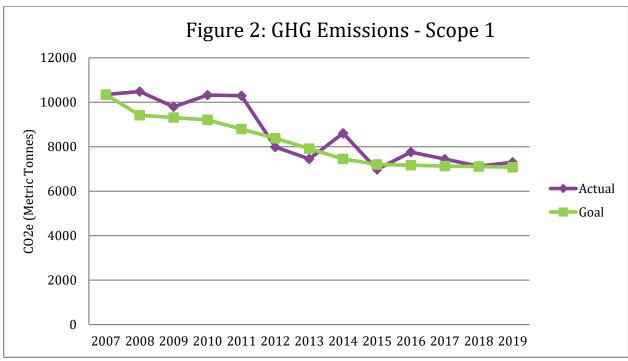
WSU's Climate Action Plan, adopted in 2009, states that the University's ultimate goal is to be carbon neutral by the year 2050. Figure 1 depicts WSU's intermediate emissions reduction targets. Per this model, WSU should have reduced its total emissions by 32% this fiscal year to stay on track towards meeting the 2050 goal. WSU's progress on this intermediate goal is reported in the sections below.



SCOPE 1 EMISSIONS

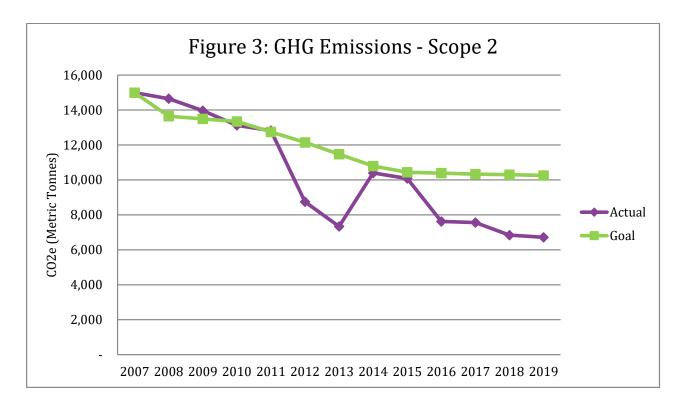
Carbon emissions are typically reported in three categories: Scope 1, Scope 2 and Scope 3 emissions. Scope 1 emissions are defined as those emissions occurring from sources that are owned or controlled by the institution, including: on-campus stationary combustion of fossil fuels; mobile combustion of fossil fuels by institution owned/controlled vehicles, and "fugitive" emissions. For Weber State University, Scope 1 emissions are primarily derived from the central heat plant which runs on natural gas (diesel during emergencies) and the University fleet which runs on traditional gasoline, diesel, compressed natural gas (CNG), and electricity. Emissions associated with fertilizer application and refrigerant leaks are also included.

As can be seen from Figure 2 below, WSU has reduced its Scope 1 emissions by 29%. The Science Lab building was demolished at the tail end of FY 2019 and therefore it is anticipated that FY 2020 numbers will show more significant reductions.



SCOPE 2 EMISSIONS

Scope 2 emissions are defined as indirect emissions generated in the production of electricity consumed by the institution. WSU surpassed its emissions reduction goal by 23% (emissions have been reduced by over 55%).



SCOPE 3 EMISSIONS

Scope 3 emissions are defined as other indirect emissions that are a consequence of the activities of the institution, but occur from sources not owned or controlled by the institution. Scope 3 emissions include University-related air travel, student, faculty, and staff commuters, and solid waste generation.

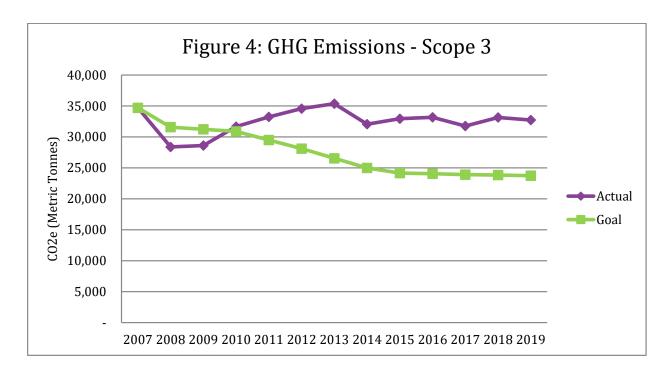
Commuting emissions data are derived from a survey conducted every few years by the Energy & Sustainability Office. The first survey was conducted in the spring of 2011, the second was conducted in the spring of 2014, and the most recent survey was conducted in fall of 2017. In all cases, surveys were sent to a random sample of students, faculty and staff through WSU's Student Voice. Survey participants were asked to report on the mode(s) of transportation used to travel to campus, the distance from their home to campus, and the average number of days per week traveled to campus. If respondents indicated that they traveled to both the Ogden and Davis

Campuses, then data for travel to both campuses was collected. Using the survey data, the commuting emissions for students, staff and faculty were calculated. See Table 1 below.

Table 1: Commuting Emissions (CO₂e metric tonnes)

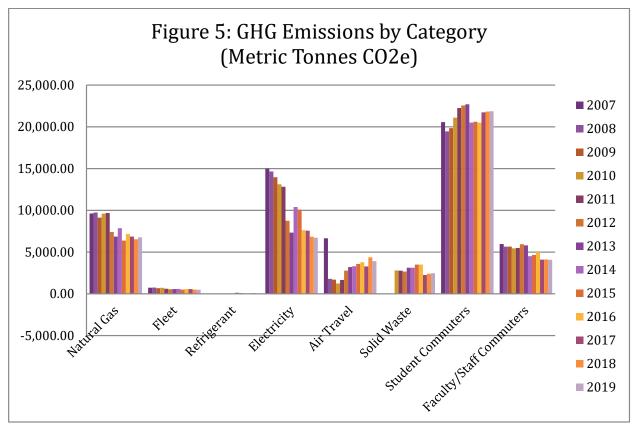
Students	Staff/Faculty
20,565	5,960
19,455	5,645
19,851	5,654
21,106	5,449
22,250	5,483
22,562	5,946
22,704	5,804
20,506	4,510
20,613	4,659
20,493	4,995
21,736	4,092
21,826	4,117
21,867	4,074
	20,565 19,455 19,851 21,106 22,250 22,562 22,704 20,506 20,613 20,493 21,736 21,826

Total scope 3 emissions are depicted in Figure 4. As can be seen from the graph below, Scope 3 emissions have decreased by a small amount (about 6%).



TOTAL GHG EMISSIONS

Figure 5 compares the primary sources of Scope 1, Scope 2, and Scope 3 emissions sources side by side. As can be seen from the chart, student commuting represents the largest source of emissions followed by natural gas and electricity consumption.

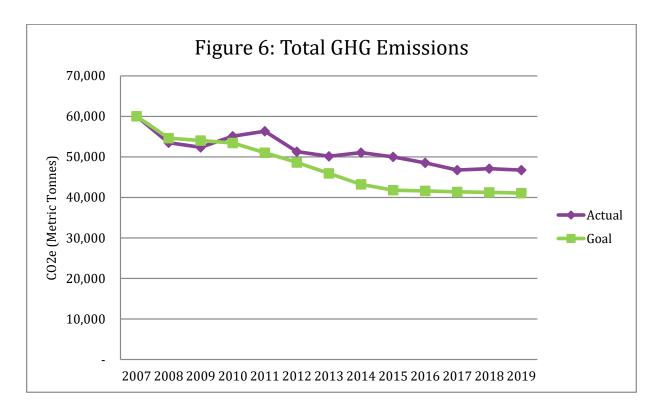


- The change in air travel from 2007 to 2008 is due to decreased air travel and due to a change in how the data is collected
- Solid waste emissions increased in Fiscal Year 2010 not because overall waste generation increased, but because the University decided to send the waste to a new landfill that does not have methane recovery capabilities.

Figure 6 shows WSU's total emissions reduction progress. While WSU is not currently meeting its goal of 32% reduction this fiscal year, significant progress has been made. Total emissions have been reduced by 22% from the baseline year.

Overall progress is being impeded by Scope 3 emissions. As long as the vast majority of the WSU community chooses to travel to campus in a single-occupancy, traditionally-fueled vehicle, it is

given that emissions from University commuters will remain high and will rise as population increases.

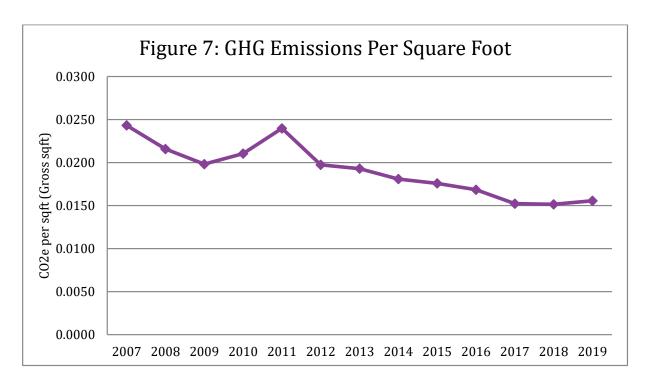


GHG EMISSIONS PER BUILDING SQUARE FOOT

As can be seen in Table 2 below, WSU reduced square footage in FY 2019 with the demolition of the science lab building. Figure 7 depicts emissions per square foot and shows a significant decrease over time, which can be attributed to the completion of multiple energy efficiency projects and to the replacement of old buildings with new, more energy efficient buildings.

Table 2: WSU Gross Building Square Footage by Year

Fiscal Year	Gross Building Square Footage
2007	2,469,079
2008	2,480,723
2009	2,642,600
2010	2,619,259
2011	2,350,587
2012	2,599,201
2013	2,599,573
2014	2,823,731
2015	2,844,289
2016	2,883,180
2017	3,072,262
2018	3,109,721
2019	3,005,194

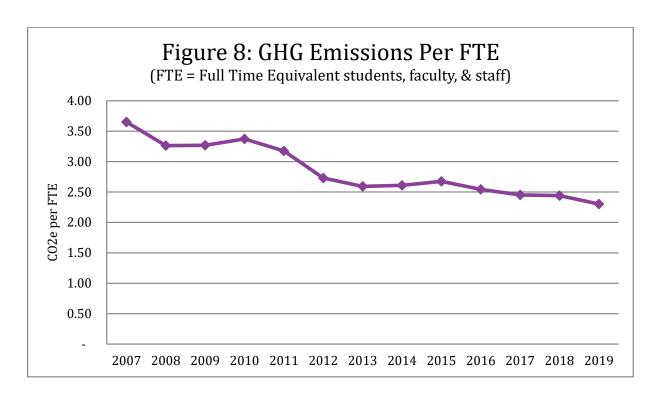


GHG EMISSIONS PER FULL TIME EQUIVALENT (FTE)

Table 3 and Figure 8 show that WSU's population increased this fiscal year and emissions per FTE decreased slightly.

Table 3: WSU Population by Year (in FTE)

Fiscal Year	FTE Students, Faculty, and Staff
2007	16,444
2008	16,398
2009	16,020
2010	16,340
2011	17,745
2012	18,793
2013	19,343
2014	19,565
2015	18,692
2016	19,085
2017	19,074
2018	19,302
2019	20,307



Energy Consumption and Conservation

Energy consumption (electricity and natural gas) represents a considerable portion of the University's GHG emissions. Energy conservation also represents an opportunity for the University to save significant amounts of money. For these two reasons most of the initial sustainability effort is being expended towards making the University as energy efficient as possible.

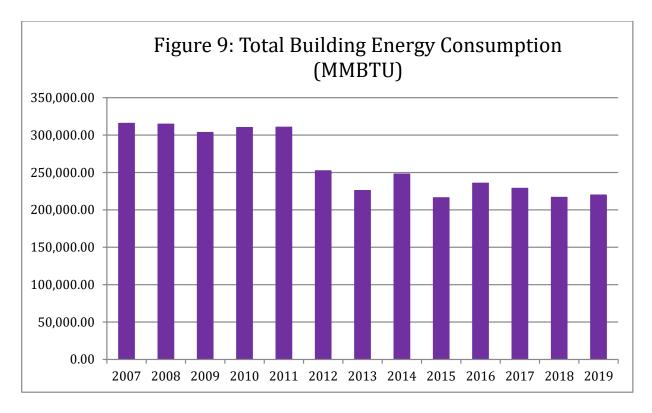
UNIVERSITY ENERGY CONSUMPTION

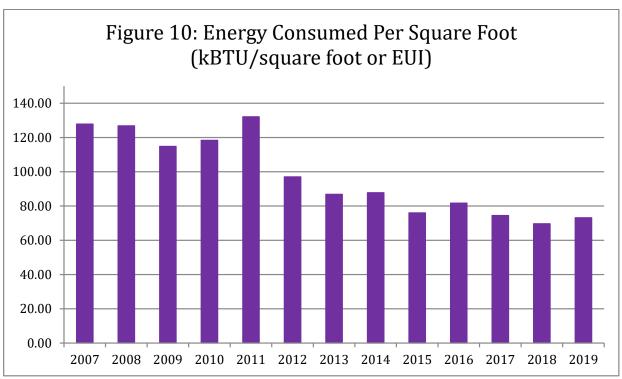
Table 4 depicts WSU's electricity and natural gas consumption figures. From the baseline year of 2007, WSU has reduced its electricity consumption by 32% and its natural gas consumption by over 30% thanks to the completion of several energy efficiency and renewable energy projects.

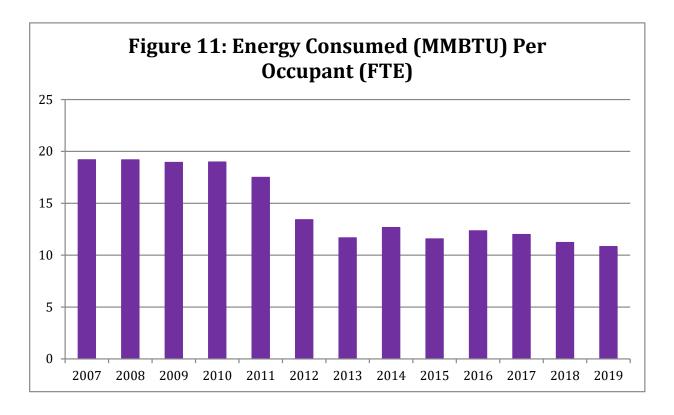
Table 4: WSU Building Energy Consumption

Fiscal Year	Electricity (kwh)	Natural Gas (MMBTU)
2007	39,811,520	179,904
2008	38,927,520	181,878
2009	38,905,072	170,782
2010	38,082,772	180,215
2011	37,717,473	181,921
2012	33,131,629	139,214
2013	28,478,606	128,673
2014	29,384,002	147,638
2015	28,310,113	119,700
2016	29,601,049	134,719
2017	29,589,090	127,973
2018	27,550,779	122,772
2019	27,240,201	127,001

Since fiscal year 2007 WSU has reduced its total building energy consumption by 30% (see Figure 9). WSU's energy consumption per square foot dropped by 43% and WSU's energy consumption per occupant was reduced by about 44% since fiscal year 2007 (see Figures 10 & 11).







ENERGY EFFICIENCY PROJECT STATUS

In 2009, AMERESCO (an energy services company) completed an investment grade audit for WSU that identified a number of projects that, once completed, would reduce energy consumption, improve efficiency, or otherwise save natural resources. Construction on these projects began in July 2010. Table 5 below provides a list of the projects and their current status.

Table 5: Energy Conservation/Efficiency Project Status (5/5/2020)

Interior Lighting Upgrade - Campus Wide	Construction - 75% complete
DEC Chiller Replacement	Complete
Replace DHW Tanks with HX	Complete
Steam powered condensate pumps	Complete
Steam Energy Upgrades Phase 1	Complete
Steam Tunnel Support Repair	Complete
Replace Piping Insulation on AHUs	In progress
Boiler 2 Economizer	Complete
VFDs for Central Plant Cooling Towers	Complete

TE Convert Inlet Vanes to VFD	Awaiting In-House Labor
Davis 2 VAV Upgrade and IDEC	Complete
Recomission Sky Suites, ED, SS,	Complete
Daniel Maken Company	Construction - 20%
Domestic Water Conservation	complete
Solar Water Heating – GYM	Complete
Solar PV Davis – Phase I	Complete
Solar PV Davis – Phase II	Complete
Solar PV Union	Complete
Solar PV Facilities Management	Complete
Solar PV Public Safety	Complete
Solar PV Davis 2 Megawatt	Complete
Solar covered parking – W10	In Progress
Computer Controls	In Progress
Weatherproofing - SS, LI, SL	Complete
Swimming Pool Cover	Complete
Electric Meters	Complete
Steam Meters	Complete
Chilled Water Meters	Complete
Irrigation Water Meters	Complete
High Efficiency Transformers	30% Complete
Street light LED upgrade	Complete
HV Switches	Complete
HV SWITCHES	Complete
Exterior Lighting	Complete
Exterior Lighting	Complete
Exterior Lighting Walkway light LED	Complete Complete
Exterior Lighting Walkway light LED DEC Power Factor Correction	Complete Complete Complete
Exterior Lighting Walkway light LED DEC Power Factor Correction Ground source Field (Phase I) Ground source Field (Phase II)	Complete Complete Complete Complete Complete
Exterior Lighting Walkway light LED DEC Power Factor Correction Ground source Field (Phase I)	Complete Complete Complete Complete Complete Complete Ongoing
Exterior Lighting Walkway light LED DEC Power Factor Correction Ground source Field (Phase I) Ground source Field (Phase II) Building scheduling and commissioning FM Building upgrade	Complete Complete Complete Complete Complete Complete Ongoing In progress
Exterior Lighting Walkway light LED DEC Power Factor Correction Ground source Field (Phase I) Ground source Field (Phase II) Building scheduling and commissioning FM Building upgrade Campus Services VRF	Complete
Exterior Lighting Walkway light LED DEC Power Factor Correction Ground source Field (Phase I) Ground source Field (Phase II) Building scheduling and commissioning FM Building upgrade Campus Services VRF Center for Continuing Education VRF	Complete Complete Complete Complete Complete Complete Ongoing In progress Complete Complete
Exterior Lighting Walkway light LED DEC Power Factor Correction Ground source Field (Phase I) Ground source Field (Phase II) Building scheduling and commissioning FM Building upgrade Campus Services VRF Center for Continuing Education VRF D13 VRF	Complete Complete Complete Complete Complete Complete Ongoing In progress Complete Complete Complete Complete
Exterior Lighting Walkway light LED DEC Power Factor Correction Ground source Field (Phase I) Ground source Field (Phase II) Building scheduling and commissioning FM Building upgrade Campus Services VRF Center for Continuing Education VRF D13 VRF Academic Athletic Center VRF	Complete Complete Complete Complete Complete Ongoing In progress Complete Complete Complete Complete Complete Complete
Exterior Lighting Walkway light LED DEC Power Factor Correction Ground source Field (Phase I) Ground source Field (Phase II) Building scheduling and commissioning FM Building upgrade Campus Services VRF Center for Continuing Education VRF D13 VRF Academic Athletic Center VRF Allied Health Phase I VRF	Complete Complete Complete Complete Complete Ongoing In progress Complete Complete Complete Complete Complete Complete Complete Complete Complete
Exterior Lighting Walkway light LED DEC Power Factor Correction Ground source Field (Phase I) Ground source Field (Phase II) Building scheduling and commissioning FM Building upgrade Campus Services VRF Center for Continuing Education VRF D13 VRF Academic Athletic Center VRF	Complete Complete Complete Complete Complete Ongoing In progress Complete Complete Complete Complete Complete Complete

Campus Services VRF	Complete
Wildcat Center RCx	Complete
Miller Administration Renovation	Complete
Dee Events Center Glazing	Complete
Lind Lecture MEP	In progress
Wattis Renovation	Complete
Library Renovation	Complete
Walkway LED Upgrade	Complete
Eccles Theater LED upgrade	Complete
Austad LED Upgrade Phase 1	Complete
Austad LED Upgrade Phase 2	Complete
Union building LED upgrade	Complete
D2 LED Upgrade	In progress
Swenson Lighting Upgrade	90% complete
Chiller plant reprogramming	In progress
Chiller plant heat exchanger	Complete
Parking lot light LED upgrade	Complete

RENEWABLE ENERGY

WSU has completed a number of renewable energy projects. (see Table 5 above). 40 KW of solar PV have been installed on the Davis D2 building in two phases. At the Ogden Campus, a solar thermal array on the gym heats the pool and another solar thermal array on a new residence hall provides domestic hot water for the building. The Shepherd Union has a 35 KW array, the Facilities Management building has a 71 KW array, and the Public Safety building has an array of just over 20 KW.

WSU's largest solar array, a 1.8 megawatt system, was installed on the Davis Campus during the summer of 2016. At its construction, the array was the largest public array in the State. This array has significantly reduced the University's carbon footprint by supplying the Davis Campus with all of it electricity renewably.

In addition to on-campus production, over the past several years Weber State University has subscribed to the Rocky Mountain Power Blue Sky program which, supports renewable energy power production, and RMP's Subscriber Solar program. This past fiscal year, WSU purchased approximately 19% of the University's electrical power from renewable energy resources (wind and solar power) through these programs.

Additional Sustainability Projects & Programs

WATER CONSUMPTION AND CONSERVATION EFFORTS

One of WSU's most significant achievements this year is the completion of the University's first water plan. The Water Action Plan identifies measures the University can implement to conserve water resources, reduce water costs, improve water quality through proper stormwater management, and optimize sustainable management of campus facilities. The plan was completed with the input from the water advisory council, which was comprised of experts (both on and off campus) and student, faculty, and staff representatives. In future years, this report will provide an update on progress towards achieving the goals outlined in the plan.

Table 6 below provides Weber State University's culinary and secondary water consumption over the past four years. Higher than average culinary water consumption in FY 2019 can be attributed to water line breaks and the use of culinary water on the practice fields to reduce the introduction of weeds. Lower secondary consumption in FY 2019 is due to a cooler and wetter year and the implementation of water conservation programs and projects.

Table 6: Water Consumption (in gallons)

Year	Culinary	Secondary	Total
2019	78,888,100	58,573,196	137,461,296
2018	67,115,900	92,331,698	159,447,598
2017	75,168,600	89,741,415	164,910,015
2016	68,946,400	86,281,500	155,227,900

The most effective water conservation program implemented to date is the Water Warrior Challenge. The Water Warrior Challenge is an incentive-based program, run by the water conservation specialist, working with the landscape area managers as the participants. The program is designed to improve Distribution Uniformity (DU), which is a measurement of how evenly water is applied to a landscape area. The lower the DU the more water is needed to maintain the landscaping. Each of the twelve landscape area managers and the water conservation specialist chose an area that needs improvement. After an area is chosen a water audit is performed. A water audit, among other things, provides the DU of the zone. After the water audit is performed, a plan to improve the DU is created and executed. After the improvement has been implemented a second water audit is performed and the data is compared. The landscaper that has the most DU percentage improvement wins the water warrior challenge and a large trophy.

WASTE PRODUCTION AND REDUCTION

Table 7 provides data on WSU's waste and recycling generation. In FY 2014 WSU switched waste hauling companies from Waste Management to Republic Services. As a result, data was not provided by Waste Management in 2014. For FY 2015 and FY 2016, the new waste hauler, Republic Services, provided the data. During those years, Republic Services assumed that all dumpsters and totes were full at each pick-up so those numbers represent the largest amount of trash and recycling the University could have produced each year. Starting in FY 2017, Republic Services agreed to weigh WSU's recycling and waste for one week each semester to provide a closer approximation of the amount of waste and recycling produced.

Table 7: WSU's Waste and Recycling Generation

2007 845 No data available N/A 2008 834 No data available N/A	6
•	
2009 833 No data available N/A	
2010 807 138 N/A	
2011 799 196 N/A	
2012 769 191 N/A	
2013 901 194 N/A	
2014 ???* ???* N/A	
2015 1,009 262 N/A	
2016 1,009 262 8.93	
2017 649 271 8.84	
2018 693 220 18.13	
2019 709 213 22.27	

^{*}WSU's waste hauler did not provide data for FY 2014.

Weber State University is working to reduce trash production and increase recycling rates via the following on-going programs:

- a. The WSU Environmental Ambassadors focus a significant amount of attention on recycling awareness and education. See the Environmental Ambassadors Update below for further information.
- b. Green waste composting: In FY 2019, the Landscape Department composted 107 short tons of green waste. This green waste is composted at the Wasatch Integrated Waste Management compost station in Davis County.

- c. Composting of post-consumer food waste: During the summer of 2012, a large composting bin (AKA the Earth Tub) was installed off the loading dock of the Shepherd Union Building. The Shepherd Union staff purchased the tub, Facilities Management installed it, and Sodexo maintains and manages the composting process. Currently Sodexo is composting all pre-consumer food waste (i.e. kitchen preparation scraps). The final compost product has been used on WSU's grounds by the Landscaping Department and by the student community garden. In FY 2019, the Earth Tub produced approximately 3 short tons of compost.
- d. Property Control recycling and salvage:
 - i. Materials processed through property control are made available to other departments or sold to the community. Sending items to the landfill is the last option.
 - ii. Electronics Recycling Unwanted electronics are repurposed within the University, sold to the public, or ultimately recycled. Last year, Property Control recycled 864 pounds of desktop computers, CRT monitors, LCD monitors, copiers, and servers through Metech.
- e. Tiny Trash Program: Tracy Hall and the Shepherd Union were the first buildings on campus to fully implement the Tiny Trash Program. Instead of receiving the regular office trash can, each office received a small trash can that attaches to the inside or outside of the office recycling bin. The tiny trash can serves as a constant reminder that most of the waste produced on campus can be recycled. It also saves liner waste since no liners are used and it saves office space.
 - Many of WSU's participating Green Departments have also voluntarily made the transition. This program will be tracked to see if recycling rates are increased through its implementation.

AIR QUALITY AND ALTERNATIVE TRANSPORTATION

Electric Vehicles

To date, WSU has six Chevy Volts, one Chevy Bolt, one Tesla, one electric Ranger, and an electric bus in its Fleet. Electric vehicle charging stations have also been installed in six locations: Facilities Management, Public Safety, Tracy Hall, the Interprofessional Education building, Stewart Stadium, and Lindquist Hall. Additional EV charging stations are in the process of being installed at Campus Services, the Swenson Gym, the Hurst Center, the Dee Events Center, and Davis Campus. WSU's first level 3 fast charger will be installed in conjunction with the Automotive and Computer Engineering building which is expected to be finished fall 2020.

Air Quality Monitoring

In partnership with the Honors Program and Environmental Ambassadors, WSU installed eight Purple Air monitors on its campuses. Six are located on the Ogden Campus, one on the Davis Campus, and one is located at the University Village Housing complex. In addition to providing information about local air quality for the campus community and general public, these monitors will be used by students for air quality research purposes. This real-time data can be viewed at: https://www.purpleair.com/

State of Utah Lawnmower Exchange

The State of Utah Lawn Mower Exchange program was completed on April 27, 2019 when 1,259 gas-powered mowers and 969 gas-powered trimmers were exchanged for electric mowers and trimmers at three locations; the Weber State University Davis Campus in Layton, the Department of Environmental Quality office in Salt Lake, and Utah Valley University in Orem. WSU distributed 417 of those mowers and 377 of the trimmers at the WSU Davis campus. WSU purchased 98 mowers with the \$25,000 UCAIR grant and 59 with the matching \$15,000 from WSU, Weber-Morgan, and Davis County Health Departments. WSU purchased the rest of the mowers and trimmers by the state Department of Air Quality (DAQ) with state funding.

Per the Utah Department of Environmental Quality, each hour spent mowing produces emissions equivalent to 160 vehicle miles traveled. The average homeowner mows their lawn about 30 times per year and spends about an hour each time mowing. Therefore, in one year, the 1,259 mowers distributed through this program will save emissions equivalent to 6,043,200 vehicle miles traveled.

Using the emissions factors developed by the Utah Department of Environmental Quality (see attached) we calculate that these 1,259 electric mowers will save the following emissions annually:

CO Exhaust	NOx Exhaust	VOC Total	PM10 Exhaust	PM2.5 Exhaust	CO2 Exhaust
21,974.6 lbs	298.9 lbs	1,999.3 lbs	33.9 lbs	31.2 lbs	137,185.9 lbs

Using the 2-stroke trimmer emissions factors, and the assumption that the average homeowner spends about 30 minutes, 30 times per year, trimming the lawn, we calculate that the 969 electric trimmers will save the following emissions annually:

CO Exhaust	NOx Exhaust	VOC Total	PM10 Exhaust	PM2.5 Exhaust	CO2 Exhaust
7,171.5 lbs	84.9 lbs	2,183.2 lbs	275.2 lbs	253.1 lbs	38,196.7 lbs

Empower Northern Utah Program

The Empower Northern Utah Light Bulb Exchange program ended on October 18, 2019 after exchanging 5,482 new, high-efficiency light-emitting diode (LED) light bulbs for residents' old incandescent and compact fluorescent (CFL) bulbs. Participants were encouraged to bring up to 15 old light bulbs per household for exchange. These exchange events were held at two locations and at two different times; the Weber State University Community Education Center on Wednesday evenings from 5:00 p.m. – 7:00 p.m., and the Weber County Library Main Campus on Saturday mornings from 11:00 a.m. – 1:00 p.m. An additional 1,018 LED bulbs were exchanged through the Futures Through Training Home Energy Assistance Target (H.E.A.T.) program. 2,500 LED bulbs were donated by Rocky Mountain Power, 2,000 were purchased with the Hall Grant funds, and an additional 2,000 bulbs were purchased by the Weber State Sustainability team.

The Empower Northern Utah Light Bulb Exchange was open to Northern Utah residents. While the program was run on a no-cost basis, the Exchange locations were chosen in the East-Central neighborhoods of Ogden in order to have the largest impact possible on low-income and underserved populations. The bulbs exchanged through Futures Through Training went to those who qualified for their H.E.A.T. program; a low-income energy bill assistance program.

The Empower Northern Utah Light Bulb Exchange program served 483 local households – 50.1% of which were explicitly low-income, and exchanged 6,500 LED light bulbs to replace old, inefficient bulbs, which has the potential to save residents more than \$43,000 collectively over the next year. These calculations are based on the fact that LED light bulbs are 80% or more efficient than incandescent bulbs, and up to 15% more efficient than CFL bulbs (according to the U.S. Department of Energy) and that each LED bulb can save the user \$12/year.

BEHAVIOR CHANGE AND EDUCATION

Green Department Program

The Energy and Sustainability Office launched the Green Department Certification Program in fall of 2014. Green Departments help create a core group of leaders across campus with the common goal of implementing sustainability practices and helping the University meet its Climate Action Plan goals. The Energy and Sustainability Office works directly with the Department Green Team to achieve sustainability points and ultimately, department certification. There are four different levels of certification: bronze, silver, gold, and green. Departments earn money by pursuing sustainability actions listed on the checklist and maintaining their certification level.

There are currently 86 Departments participating in the program. 75 of those departments are certified with 16 being green certified, 9 gold certified, 21 silver certified, and 29 bronze certified. More information on the Green Department Program including the checklist with all

prerequisites and possible points can be found at https://www.weber.edu/sustainability/GreenDept.html

Environmental Ambassadors Update

During the 2019-2020 academic year, the Environmental Ambassadors (EA) hosted and participated in many service and involvement events through the summer of 2019 to spring 2020 to increase environmental awareness on campus and to overall foster a sustainable culture at WSU. Additionally, they combined forces with overlapping interests from other like-minded clubs, such as WSU's chapter of Food Recovery Network and the campus Community Garden, to become the WSU Sustainable Clubs.

In Summer 2019, EA held many Trail Digs where they maintained and cleared away trash on their club-owned trail up Strong's Canyon and participated in numerous campus Orientation Fairs to draw in new incoming students.

At the beginning of the Fall 2019 semester, EA had the largest turn-out ever in attendance in their club kick-off meeting of 23 individuals who gave their signatures to the club's 2019-2020 "Be the Change" Sustainability Pledge. Throughout Fall 2019, EA assisted with the Empower Northern Utah LED Light Bulb Exchange community program launched by the WSU SPARC office to exchange old incandescent or CFL light bulbs for new, energy-efficient LED bulbs. EA exchanged a total of 250 LED bulbs with WSU students. Along with this program, EA hosted events with WSU Landscaping including the semi-annual Fall 2019 tree planting where students and staff planted 9 trees, and a 2-day Xeriscaping Project to conserve water sponsored by the WSU Bookstore. Speaking of water, EA helped WSU win the \$5,000 water conservation award from the Utah Division of Water Resources fourth annual competition "H2Oath: Utah's Water-Wise Pledge," by gathering and encouraging individuals to take part in the online oath to adopt water-wise behavior. EA also hosted a Compost Bin Workshop to educate students on how to make their own compost bins.

Near the end of 2019, EA partnered with the United Nations Association (UNA) Chapter at WSU during the United Nations week, themed "Our Planet, Our Future," to collaborate a Panel of environmental and politically focused WSU professors to discuss their thoughts on the UN. This was followed by a Film Screening of "The Human Element," an environmental documentary.

In Spring 2020, EA held the very successful 2-day New Year New Use Free Swap event in January designed to be a spring cleaning opportunity for students, faculty, staff, and WSU community members to donate items they no longer needed to the event and to take items from the event that they may need. The purpose was to help reduce the large amount of waste expected to enter the landfills. All leftover items were donated to Savers. This had a total of 207 participants and

tracked 1037.5 pounds of donated items. Following this, and during the whole month of February, EA hosted the annual Statewide Clear the Air Challenge at WSU where nearly 100 WSU participants helped improve our air quality by saving 7.2 tons of Carbon Dioxide from entering the atmosphere.

Unfortunately, due to COVID-19, the rest of EA's Spring 2020 events (such as the highly requested second Compost Bin Workshop, Spring Tree Planting, Spring Xeriscaping Project, and the Green Move-Out) were canceled.

Overall, in the 2019-2020 academic year, EA collaborated with over ten organizations, and coordinated over 50 service and involvement events to provide educational outreach to numerous individuals which had the participation of over 400 students, faculty, and staff.

CONTACT INFORMATION

Contact Information

Please feel free to contact us with any questions you might have! Additional information can be found at: www.weber.edu/sustainability

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