



**SUSTAINABILITY
COMMITTEE**

CSU, CHICO

ANNUAL REPORT

2019 - 2020



CALIFORNIA STATE UNIVERSITY, CHICO

SUSTAINABILITY AT CHICO STATE

Chico State has long been a sustainability trailblazer. In 2006, Chico State was a founding signatory of the American College and University Presidents' Climate Commitment. This climate commitment is an outward expression of our campus's leadership in charting a path toward a more sustainable campus community. We are committed to addressing climate change by reducing and ultimately neutralizing greenhouse gas emissions by the year 2030 and accelerating research and educational efforts to equip students to be leaders for a more sustainable future.

ABOUT THE CAMPUS SUSTAINABILITY COMMITTEE

Updated in 2019, EM-19-033 outlines the framework for the Campus Sustainability Committee (CSC), which will serve as the institutional structure to implement the President's Climate Commitment. Using the Climate Commitment and our Gold Sustainability Tracking, Assessment & Rating System™ (STARS®) status as guides, the CSC works to fully integrate sustainability across campus and deepen roots within our community.

The membership of the CSC reflects the ability of the committee to facilitate accountability for attaining our goals and includes representation from all divisions on campus as well as most auxiliaries. The CSC provides leadership in identifying mechanisms, resources, and structure to integrate sustainability concepts into all core functions of the University.

Through subcommittees, the CSC addresses specific focus areas of campus sustainability goals. Each subcommittee is led by a member of the CSC and includes additional CSC members, students, faculty, staff, and community members as appropriate. In academic year 2019-20, there were eleven subcommittees. These subcommittees are the pathway for students, faculty, staff, and community members to solve the challenges we face and will evolve as the needs of campus change.





CSC SUBCOMMITTEES

Committee	Lead
1 Curriculum	Tim Sistrunk
2 Research	Sandrine Matiasek
3 Student Engagement	Kendall Ross
4 Alternative Transportation	Cheri Chastain
5 Zero Waste	Ryan Rodriguez
6 Procurement	Tom Rider
7 Natural Environment	Eli Goodsell
8 Water	Nani Teves
9 Agriculture	Cindy Daley
10 Energy	Mike Guzzi
11 Built Environment	Joe DeCarlo

Subcommittees work together to achieve the following:

- Identify annual priorities and goals that will progress campuswide objectives
- Meet with members, create work plans and timelines, plan for needed resources, and create impactful campus projects
- Implement plans and provide progress reports to CSC

ACADEMIC YEAR 2019-20 MEMBERSHIP ROSTER

Role	Name
Vice President for Academic Affairs	Sara Trechter, designee
Vice President for Business and Finance	Jeni Kitchell, designee
Assoc. Vice President of Facilities and Capital Projects	Mike Guzzi
Executive Director, Associated Students Admin. Office	Jamie Clyde, designee
Campus Sustainability Manager	Cheri Chastain
Housing Facilities Director	Joe DeCarlo
Associated Students Sustainability Coordinator	Nani Teves
Associated Students Recycling Coordinator	Ryan Rodriguez
Associated Students Sustainability Affairs Commissioner	Jared Geiser
GE Pathway Sustainability Coordinator	Don Miller
Rawlins Endowed Professor	Cindy Daley
Appointed by the President	Eli Goodsell
Appointed by VPAA	Nate Millard
Appointed by VPUA	Rachel Simmons
Appointed by VPSA	Kendall Ross
Staff appointed by Staff Council	Natalie Carter
Staff appointed by Information Resources	Scott Kodai
Student appointed by AS Sustainability Coordinator	Sofia Lepore
Student appointed by Campus Sustainability Manager	Alyssa Myers
Faculty member appointed by Academic Senate	Timothy Sistrunk
Faculty member appointed by Academic Senate	Sandrine Matiasek



MESSAGE FROM COMMITTEE CO-CHAIR SARA TRECHTER

In September 2015, the General Assembly of the United Nations adopted the 2030 Agenda for Sustainable Development with 17 Sustainable Development Goals at its core. These goals target human issues of hunger, poverty and promote well-being, education, and gender equity, equality, and education on the one hand. They also promote climate action goals above and below water, with clean energy, sustainable communities, and reduced consumption as additional areas of concern. Though the goals may seem disparate, they inherently recognize the close connection between social and environmental peace and justice in the context of global development. Similarly, seemingly disparate goals stand at the heart of CSU, Chico's revised 2019 mission and strategic priorities: "Equity, diversity, and inclusion; resilient and sustainable systems; and civic and global engagement." Yet, these priorities are clearly linked in the effects that our University wishes to see in its future and the future of California. In this last year, the Campus Sustainability Committee (CSC) has made such linkages its priority in theory and in the concrete actions it has taken.

The CSC reformation in fall 2019 led the committee to envision sustainability and climate action planning, not only as a priority for our University strategic planning but through targeted, SMART goal planning within 11 separate subcommittees. The curriculum committee developed a plan and criteria to relaunch the Green Leaf sustainability recognition for University courses, a long-recognized achievement of our focus on integrating climate action and social justice within our curriculum. Research efforts throughout the University were inventoried. Student engagement efforts expanded and recognized, especially through cooperation on

expanding bike infrastructure with alternative transportation planning. Each group (water, zero waste, agriculture, procurement, natural environment, built environment, and energy) created action plans that will continue into 2020-21.

When faced with the exigencies of COVID-19 in mid-March, the CSC did not pivot or turn away from SMART goals but rather realized that many of these goals could not be completed within the year. We shifted focus to address the immediate exigencies of COVID-19 and promote a sustainable response, which led to unexpected successes and lessons for the future. The virtual This Way to Sustainability Conference saw participation at higher levels than ever before. The CSC's additional promotion of CSU, Chico as a host university for the American Association for the Advancement of Sustainability in Higher Education's (AASHE's) virtual Global Conference on Sustainability in Higher Education resulted in more than 310 faculty, staff, and student participants from CSU, Chico—more than any other institution. The conference focus of "Mobilizing for a Just Transition," perfectly complemented CSU, Chico's revised goals, aligning with the UN's Sustainable Development. Finally, the CSC recommended specific actions to Academic Senate and University administration in the realms of telecommuting, reduced travel, electronic and digital signatures, electronic RTP submission, building operations, and bolstering adoption of local food sources for University consumption as we witnessed both savings and achievements that were rendered necessary through adaptation to the norm of the pandemic.

The developments this last year have challenged the CSC, and the challenges have led to faster-paced innovation and renewed goals.

CURRICULUM SUBCOMMITTEE

Lead: Tim Sistrunk, faculty, History Department

Committee members: Cindy Daley, Eli Goodsell, Angela Casler, Nate Millard, Don Miller, Al Schademan, Cheri Chastain, Mark Stemen

Key Initiatives and Accomplishments:

1. Refresh the Green Leaf course designation in the University Catalog
 - a. Updated the student learning outcomes (SLOs) to focus on climate change and resilience
 - b. Drafted criteria for Green Leaf identification eligibility
 - c. Identified possible structure for management of Green Leaf designation

Throughout fall 2020, this subcommittee will continue to finalize this initiative and achieve approval through proper University channels. The Curriculum Advisory Board is currently reviewing the drafted proposals. Completion for the Green Leaf update is expected spring 2021 with the program in full implementation in fall 2021.

RESEARCH SUBCOMMITTEE

Lead: Sandrine Matiasek, assistant professor, Geological and Environmental Sciences Department

Committee members: Mandy Banet, Pablo Cornejo-Warner, Jeff Davids, Kristen Kaczynski, Jennifer Rotnem, Natalie Carter

Key Initiatives and Accomplishments:

1. Inventory of sustainability research on campus
 - a. Work began to combine Chico State Enterprises (CSE) and Center for Water and the Environment (CWE) research project lists and expanded to other Research, Scholarly, and Creative Activities (RSCA) not included in these lists
 - b. A student was hired to assist with this data collection project

Moving forward, the subcommittee will work to complete the inventory in academic year 2020-21. The subcommittee will continue to work to create an online repository for sustainability research at CSU, Chico with links to final grant reports, open access publications, etc. The subcommittee will also partner with the Curriculum subcommittee to create a green leaf research "tag" to designate sustainability research. in full implementation in fall 2021.

STUDENT ENGAGEMENT SUBCOMMITTEE

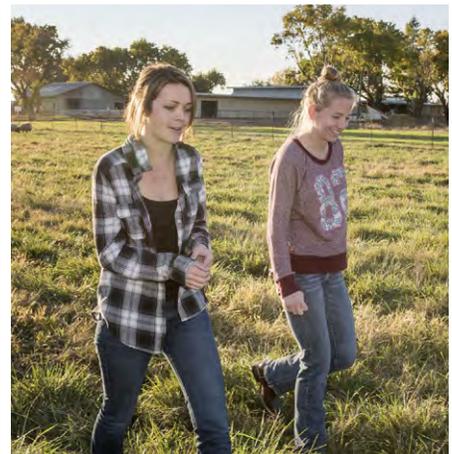
Lead: Kendall Ross, director of Recreational Sports

Committee members: Sarah Wood, Katie Peterson, Mariana Apraiz-Pauls, Haley Coffman, Jabari Jenkins, Katrina Rynne

Key Initiatives and Accomplishments:

1. Compile a list of current departments, programs, and organizations that focus on student engagement of campus sustainability
 - a. A list has been compiled and will be posted to the sustainable students section of the Sustainability at Chico State website where it can be regularly updated
2. Investigate establishing a thrift store for housing to store and sell items for move out/in
 - a. Work was begun on this initiative but with the future of on campus housing in a bit of flux with COVID-19 has been put on hold indefinitely
3. Partner with the Alternative Transportation Subcommittee to increase awareness and education of the B-Line subsidy program for students and achieve Bicycle Friendly University certification status
 - a. Workshops and events were planned and ready to launch late March and early April
4. Increase number of Sustainability Fund Allocation Committee (SFAC) grants submitted from fall 2019 to the spring 2020 semester
 - a. With the move to a virtual semester, the spring 2020 call for SFAC proposals was put on hold
5. Pursue a sustainable vending machine option to be placed in the BMU, or high foot traffic area, to include reusable products for students to purchase
 - a. With campus being primarily virtual, this has been put on hold indefinitely

Moving forward, this subcommittee will focus on in-person and community-based events to engage the campus student population in sustainability related activities such as a community clean up on America Recycles Day.



ALTERNATIVE TRANSPORTATION SUBCOMMITTEE

Lead: Cheri Chastain, sustainable programs manager, Facilities Management and Services

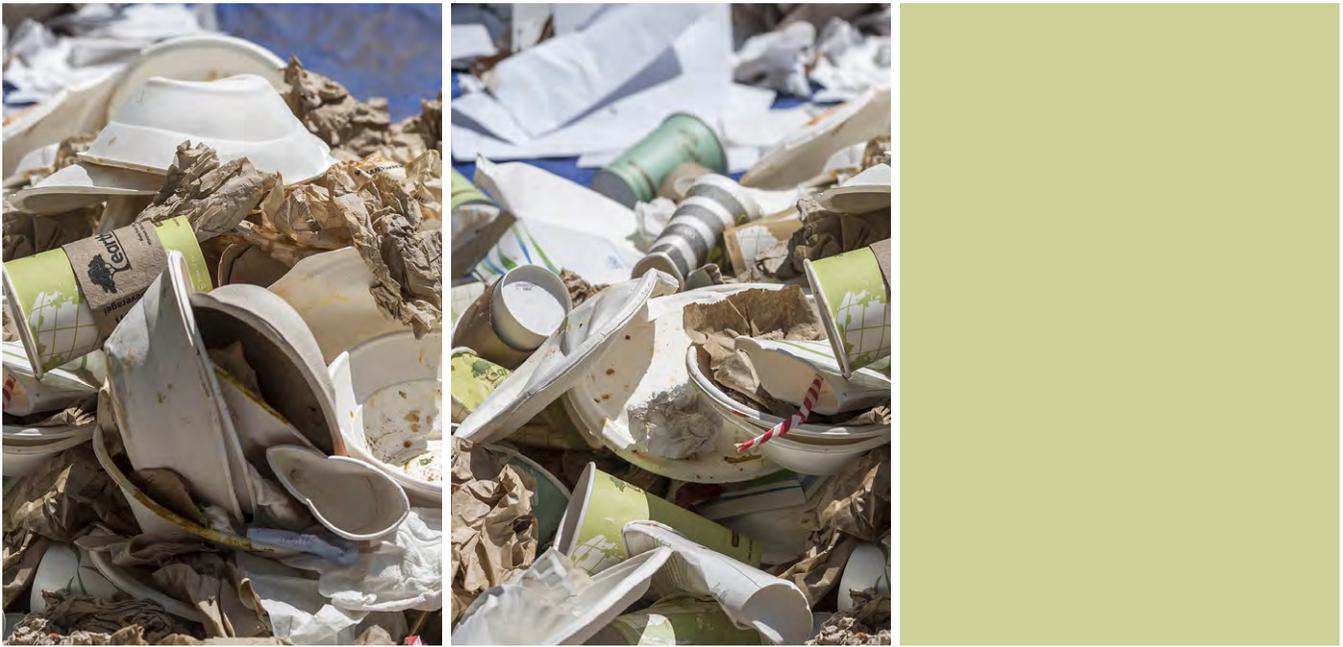
Committee members: Wyatt West, LaDona Knigge, Megan Berg, Thomas McNairn, Christopher Nicodemus, Bikram Kahlon, Ivan Garcia, Heather Mccafferty, Jeff Schwein, John Pearson

Key Initiatives and Accomplishments:

1. Assess the design and flow of the pilot east-west bike path on campus for needed improvements before making the path permanent
 - a. GEOG 436-Transportation Planning studied the bike path in fall 2019 and provided recommendations to FMS for consideration
2. Alleviate bike theft and vandalism
 - a. Researched secure bike parking options and partnered with the Built Environment subcommittee to estimate the cost of enclosing the bike parking area near Whitney Hall
 - b. Estimate is available when funds are available for this project
3. Improve ridership on the B-Line transit system
 - a. Developed a targeted education and awareness campaign that included a bus scavenger hunt, an open bus day, and a social media campaign that was set to launch the last week of March
4. Bike Friendly Campus Certification through the League of American Cyclists
 - a. Developed a strategy to implement programs and training for campus users around bike safety that was set to launch in late March and early April
 - b. Without the planned events, the application was still submitted in October 2020
5. Partner with the City of Chico to implement a scooter sharing or other mobility sharing program
 - a. Subcommittee members worked to have this item move through City Council, Internal Affairs Committee, and to the Bike/Ped Work Group for City action

For fall 2020 and beyond, this subcommittee will continue to work on alternative transportation improvements including applying for funding to make the bike path on campus permanent, developing virtual bike educational materials, mapping alternative transportation infrastructure in the city, and promoting the safe and sustainable use of the B-Line transit system.





ZERO WASTE SUBCOMMITTEE

Lead: Ryan Rodriguez, recycling operations coordinator, Associated Students

Committee members: Mike Alonzo, Cheri Chastain, Durbin Sayers, Megan Berg, Joe Decarlo, Becky Holden, Nani Teves

Key Initiatives and Accomplishments:

1. Establish baseline of volume of recycling and composting currently in the trash
 - a. Conducted a sample audit in November 2019 revealing that 15 percent of what was in the trash was actually recyclable while an additional 8 percent was compostable
 - b. An audit was planned for housing facilities and AS Dining and will resume when more regular campus activities commence
2. Centralize trash and recycling collections throughout the BMU, eliminating plastic bag
 - a. Project was complete in the BMU in 2019 with dozens of deskside bins being removed
3. Develop a central waste tracking and data management system to streamline data collection and reporting
 - a. Initial research was conducted and a system was started in May 2020
4. Deploy the OZZI system for reusable food containers, reducing landfill contributions
 - a. Supported AS Dining with rolling out the system which was delayed with COVID-19 impacts

Recycling collections have transitioned to Facilities Management and Services (FMS). This subcommittee will assist campus in this transition by furthering the tracking and reporting work already begun, developing education and outreach materials to improve collection quality, and conducting audits on where improvements are needed.

PROCUREMENT SUBCOMMITTEE

Lead: Thomas Rider, dining services director, Associated Students

Committee members: Sara Rumiano, Zachary Smith, Kenny Wahl, MacKenzie Deeter, Cheri Chastain

Key Initiatives and Accomplishments:

1. Establish guidelines to limit purchases of materials and products with potentially hazardous disposal requirements
 - a. Guidelines were drafted and distributed to key chemical procurement staff on campus as well as posted to the sustainability website
2. Analyze outputs to determine what to focus CSU, Chico procurement guidelines towards, i.e., mitigate landfill waste by choosing sustainably responsible vendor partnerships
 - a. Put on hold until the CSU Sustainable Procurement Policy is adopted and being implemented
3. Increase hyperlocal food procurement in Dining Services
4. Develop sustainable swag guidelines
 - a. Posted to the sustainability website

Moving forward, the subcommittee will develop a procurement outreach program to promote the importance and pathways for sustainable procurement activities. It is expected that the CSU will release a systemwide sustainable procurement policy in the next year which will serve to guide future work of this subcommittee.



NATURAL ENVIRONMENT SUBCOMMITTEE

Lead: Eli Goodsell, director, Big Chico Creek Ecological Reserve

Committee members: Cindy Daley, Jason Schwenkler, Megan Kurtz

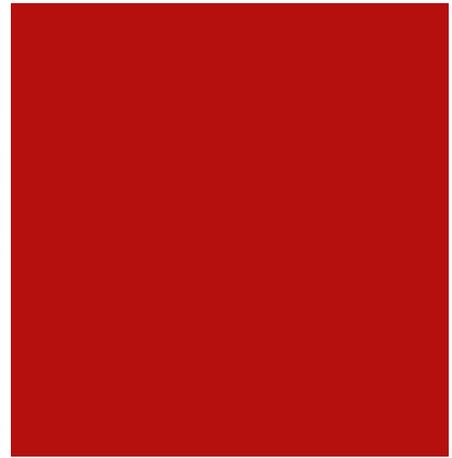
Key Initiatives and Accomplishments:

1. Seek funding to evolve a biochar research project already begun at the Big Chico Creek Ecological Reserves (BCCER)
 - a. Application was submitted to California Climate Investment but was ultimately not awarded
2. Measure the existing carbon storage capacity of the soils at BCCER, the University Farm, and the campus core
 - a. University Farm samples were collected, campus sample collection began summer 2020, and the scope process for BCCER began late summer 2020

In the coming year(s), this subcommittee will work to create a Resiliency Collaborative to focus on resiliency in the natural environment and working lands through scholarship, teaching, and service. This initiative is a campuswide goal as adopted as part of the University Strategic Plan implementation process.

With a focus on the natural environment and working lands, the collaborative identifies and prioritizes solutions for current and future challenges by conducting research, securing resources, implementing projects, and telling stories focused on the recovery and resiliency of our region. This mission will be fulfilled through fostering a space where ideas and people can gather, collaborate, collide, produce, and learn.





WATER SUBCOMMITTEE

Lead: Nani Teves, program coordinator, Associated Students Sustainability

Committee members: Mike Alonzo, David Kehn

Key Initiatives and Accomplishments:

1. Research existing water policies and state requirements Chico State should be adhering to and assessed current status
 - a. Existing policies and thresholds for reduction were researched and will be posted to the Sustainability at Chico State website
2. Catalog the recent water conservation activities and research work happening on campus
 - a. A list of recent accomplishments was compiled and will also be posted to the Sustainability at Chico State website
3. Cumulate campus Cal Water accounts and create a code within the Cal Water system
4. Begin an inventory and map of indoor hydration stations
5. A map currently exists in FacilitiesLink but the data needs to be refined to show which stations have bottle fillers, then hydration stations will be shown on the interactive campus map
6. Formalize the use of portable hydration stations for outdoor events in lieu of single-use plastic water bottles
 - a. Began to develop an inventory, usage guidelines, and cleaning procedures but project was put on hold for COVID-19
 - b. The subcommittee will pick this back up once more normal on-campus activities resume
7. Advocated for replacement of the water and energy intensive dishwasher in the BMU with a more efficient one
 - a. An SFAC application was submitted for funding but was not awarded
8. Measured pressure efficiency of irrigation systems beginning with the soccer field

AGRICULTURE SUBCOMMITTEE

Lead: Cindy Daley, faculty, College of Agriculture

Committee members: Noelle Ferdon, Jamal Javanmardi, Scott Grist, Sheila McQuaid, Matt Housley, Tom Rider, Jake Brimlow, Lee Altier, Garrett Lile, Priya Tuvell

Key Initiatives and Accomplishments:

1. Catalog existing efforts on and around campus
2. Develop a whole farm soil carbon assessment, including rangeland at Meridian Road and the University Farm
3. Cumulate campus Cal Water accounts and create a code within the Cal Water system
4. Create an integrated food procurement program plan around the Real Food Challenge that includes local farms, the University Farm (UF), and the Organic Vegetable Project (OVP)
5. Began to build a plan for food waste composting at the UF composting facility
6. Formalize the use of portable hydration stations for outdoor events in lieu of single-use plastic water bottles

Future goals for the subcommittee include implementing the CFP at the University Farm and rangeland at Meridian Road as well as assisting in reinventing the North Valley Food Hub (NVFH) which serves as a model system that matches growers with outlets for local food supply. Implementing a robust food scraps and green waste composting facility at the UF will also be an important goal for this subcommittee moving forward.



ENERGY SUBCOMMITTEE

Lead: Mike Guzzi, associate vice president, Facilities Management and Services (FMS)

Committee members: Jason Whiteley, Marie Patterson, Cheri Chastain, Ashley Mannin

Key Initiatives and Accomplishments:

1. Write and publish a campus Strategic Energy Master Plan (SEMP) outlining steps to be taken to reduce emissions from natural gas combustion and electricity use as well as associated costs for each recommendation
 - a. FMS contracted with faculty member Marie Patterson to write the plan which will outline not only a path to carbon neutrality, but will address prioritization for working on deferred maintenance in alignment with the larger CSU, Chico Master Plan
2. Through a Master Enabling Agreement (MEA) established by the Chancellor's Office, add solar to four buildings on campus: the new Science Building, Wildcat Recreation Center (WREC), Bell Memorial Union (BMU), and finishing out the solar on Parking Structure II
 - a. An RFP was finalized and published in July 2019 with a vendor identified a few months after
 - b. FMS has been working to put a contract in place which is being coordinated through campus counsel and is close to finalization with solar slated for installation installed during the 2021 calendar year activities resume

This is intended to be the first phase in a multi-phased plan to put in place as much renewable energy as possible. Phase II is already in the works with a plan to place solar at the University Farm to make it a net zero energy user, with follow on phases focused on the main campus and battery storage. The subcommittee will continue to implement the recommendations made in the SEMP in the coming years.

BUILT ENVIRONMENT SUBCOMMITTEE

Lead: Joe DeCarlo, University Housing grounds

Committee members: Marie Patterson, Kaylee Biedermann, Zachary Smith, Jason Whiteley

Key Initiatives and Accomplishments:

1. Develop process to enforce campus-wide Zero Scope I Procurement Policy
 - a. Work began to develop a process but was put on hold as priorities shifted to COVID-19 response
2. Conduct an assessment of lighting conditions in stairwells across campus
 - a. This work was completed by the Green Campus project coordinators and interns with results to be included in the SEMP
3. Scope a secure bike parking facility near Whitney Hall
 - a. Estimate was determined to enclose a secure bike parking area and is awaiting funding

THIS WAY TO SUSTAINABILITY CONFERENCE

The 15th annual This Way to Sustainability conference took place virtually March 26–27, 2020. With a theme of “Resiliency in a Changing World,” the conference featured keynote speakers Nikki Silvestri, CEO and founder of Soil and Shadow; Kelsey Juliana, founder of Our Children’s Trust; and Erin Meezan, vice president and chief of the Sustainability Office, Interface Flooring.

Converting from an in-person event to a fully virtual conference took place in a two-week period and featured livestream interactive presentations from leaders, researchers, and students in seven different tracks that focused on all aspects of sustainability: environmental,

land planning, and natural systems; built environments, engineering, and waste management; health, wellness, diet, and nutrition; sustainable food systems and regenerative agriculture; entrepreneurship, marketing, and supply chain management; social justice and public policy; and arts, humanities, and creative expression.

The conference had a record number of registrations: 17 CSUs, 9 UCs, 10 Community Colleges, 3 school districts, 15 non-California based universities, and 6 international universities. Being a virtual conference also boasted a carbon-free commute conference!

LOOKING AHEAD: 2021 CONFERENCE

The 2021 conference theme for This Way to Sustainability will be “Resilience from the Ground Up: Strengthening Diversity in Soil, Communities and Economies.” The format will again be 100 percent virtual, providing a great opportunity for individuals all over the world to participate.

The 2020 Keynote speakers:

- Leah Penniman, MA: “Ending Racism and Injustice in the Food System and Reclaiming the Inherent Right to Belong to the Earth”

- Katharine Wilkinson, PhD: “Drawdown: How Empowering Women and Girls Can Help Stop Global Warming”

- Jennifer Atkinson, PhD: “Eco-Grief and Climate Anxiety”

- Bill Shireman, PhD: “In This Together: Nonpartisan Solutions to Our Climate Crisis”



CONCLUSION AND HOW TO GET INVOLVED

To get involved with the Campus Sustainability Committee or learn more, visit our website: <https://www.csuchico.edu/sustainability> or reach out via email to sustainability@csuchico.edu.

Thank you for your commitment in building a sustainable future at Chico State.





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