Moorpark College Sustainability Plan Outline Education/Awareness/Impact

- 1. Reduce the use of single use non-degradable products
 - 2. Production of renewable energy/ energy reduction
 - 3. Reduced Water Usage
 - 4. Greenhouse Gas Reduction
 - 5. Sustainable Education

Reduce the use of single use non-degradable products

Recycling provides great benefits to society and overall reduces our impact on the environment. However, some impracticalities still exist that diminish the impact recycling could have. Therefore, it is always more beneficial to, whenever possible, avoid using items that negatively affect the environment in the first place.

What we are doing well

- 1. Water Refill Stations
- 2. Promoting Reuse
- 3. Awareness Campaigns
- 4. Events Promoting Sustainability

- 1. Stricter requirements for food vendor containers
 - a. It is important to have an affordable option for students on campus, but students prefer not to waste.
 - b. Sustainable packaging is marginally more expensive than nonsustainable packaging, but cost could easily be reimbursed
- 2. Reduce plastic items for sale in bookstore
 - a. Excessive packaging is often unnecessary
- 3. Provide healthier options for student snacks
 - a. Healthy food generally requires less packaging
 - Healthy food is created with more sustainable methods therefore Moorpark would be supporting sustainable practices on and off campus

- c. Students desiring healthy options currently buy them off campus, losing potential income for the campus
- 4. Initiate a recycling awareness campaign
 - 1. This initiative is currently in the works
 - 2. Providing signage for what can and can't be recycled will reduce widespread waste throughout campus

Challenges

- 1. Changes regarding food vendors may affect entire district
- 2. Barnes and Nobles runs the college bookstore
- 3. Healthy food typically has a shorter shelf life

Production of renewable energy/ energy reduction

The energy provided to our community comes from a variety of natural resources which by definition are finite. We can reduce our carbon footprint and establish ourselves as a leader in the community by utilizing renewable energy.

What we are doing well

- 1. Implementation of solar panels in parking lot
- 2. Automatic light switches
- 3. LED lights
- 4. Highly efficient HVAC systems and controls
- 5. Sophisticated, modern irrigation system and controls

- 1. Change remaining switches to automatic
 - a. Many light switches on campus are automatic, changing the old manual switches will keep campus consistent

- b. Manual lights are frequently left on when room is not in use
- 2. Look into increased battery storage
 - Solar energy is only practical during certain times, unless extra battery storage is secured
- 3. Create manageable goals for entirely renewable energy
 - a. As Moorpark joins the movement towards conserving energy the campus must set goals to reach net zero
 - b. Creating malleable goals will keep Moorpark on the cutting edge of new energy technologies
 - c. Moorpark College can utilize relevant research to increase its sustainability practices over time

Challenges

- 1. Automatic switch timers lack sufficient on-time duration capabilities to guarantee uninterrupted illumination while bathroom is in use
- 2. Peak electrical costs are during hours solar can't solely provide energy. This may be circumvented through increasing battery storage

Reduced Water Usage

Institutions in California especially have a need to be conscious of water usage. While most of California's water usage comes from agriculture, large properties must do their part to conserve water. It therefore is Moorpark college's responsibility to continue and build upon current conservation efforts.

What we are doing well

- 1. Automatic sinks
- 2. Not running large fountain
- 3. Irrigation Technology
- 4. Meeting/Exceeding state regulations

How do we improve?

- 1. Change remaining manual sinks
 - a. Few manual sinks remain on campus, but the remaining sinks can be converted to automatic
 - b. Manual sinks are frequently left running
- 2. Bioswales
 - a. Creating bioswales that match our environment we can reduce water consumption on a small scale
- Allocate areas for low water use plants.
 - a. Native Southern Californian plants or Mediterranean plants are likely candidates
 - b. Finding areas on campus that need to be renovated is ideal for new low water plants
 - c. Projects that are already in planning will incorporate low water plants
 - 4. Replace the large fountain with a new project
 - The fountain is old, and renovating would be costly. Replacing fountain has potential to save money long term
 - b. Students would like to see a new fixture on campus

Challenges

- 1. Allocating funding for new projects such as fountain replacement
- 2. Wide variety of plants means more maintenance

Greenhouse Gas Reduction

There are certain elements to running a college campus that inherently increase the amount of greenhouse gasses put into the atmosphere. However, changing certain policies and practices can significantly reduce our impact.

What we are doing well

- 1. Using landscaping equipment only at designated times
- 2. Free bus rides with valid student I.D.
- 3. Addition of trash compactor
 - 1. Reduced distance trucks travel by more than half
- 4. Reduction of water coincides with reduction of greenhouse gas production, as well as energy savings
 - 5. Successful tree planting reduces greenhouse gas

- 1. Ride-share program
 - a. Ride sharing will not only reduce the carbon footprint but also save students money
 - b. Commuter schools such as Moorpark College can greatly benefit from providing students ride-sharing opportunities
- 2. Transition from gas to battery operated equipment
 - a. As battery technology improves the feasibility of using battery equipment increases
 - b. Can also reduce noise pollution
 - c. Health of campus staff can be protected by transitioning to battery operated equipment
- 3. The "Gold Standard"
 - a. Due to the relatively small amount of buildings on campus keeping a high standard of construction for new projects will be of the utmost importance

- 4. Plant a designated number of trees each year/ remove old trees when applicable
 - a. Planting new tree not only reduces carbon, and long-term water usage, but also reduces heat
 - b. Removing old trees that have outlived their practicality and replacing them with new trees will continue to improve Moorpark College's sustainability and appearance

Challenges

- 1. Post COVID-19 life may entail less public transit
- 2. Gold standard construction is more costly
- 3. Battery operated equipment requires more frequent recharges
- 4. Creating awareness for ride-share program

Sustainable Education

Every effort taken by Moorpark College to reduce our carbon footprint and create a more sustainable campus, should revolve around the all-encompassing goal of educating the student body. With that philosophy in mind, sustainable education will be integrated into the classroom.

What we are doing well

- 1. Campus Environment Committee (CEC)
- 2. Environmental Science Department
- 3. Director of Sustainability/ Associated Student Sustainability Committee (ASSC)

- 1. Expand Environmental Science Department
 - a. Moorpark currently has a very limited environmental science program not meeting the high-level of interest from students
 - b. By not offering more majors in the field of sustainability Moorpark is losing a population of students
 - c. Expanding the environmental sciences programs will attract faculty to competitive positions
- 2. Make Campus Environment Committee more accessible
 - a. CEC is an excellent resource for students, but it infrequently attended
 - b. Experimenting with different meeting times may draw more students and faculty
 - Making meetings available virtually will make meetings more inclusive for everyone on campus
- 3. Integrate sustainability into classroom learning outcomes for all departments
 - a. Sustainability is often seen as exclusive to environmental sciences, but can be incorporated in all disciplines
 - b. By including sustainability across courses Moorpark will create more informed citizens
 - Cultivating a culture of environmental consciousness requires expanding sustainable learning to all disciplines in order to reach the largest population of students possible
- 4. Culinary program
 - 1. Appealing to different student segment
 - Provide nutritious food
 - 3. Provides an opportunity to involve the campus garden in student nutrition
- Composting program
 - 1. Expansion of science program
 - 2. Moorpark experimented with some success. Program can e revitalized and used at campus garden

Year One Goals

- 1. Reduce the overall use of plastic/ Styrofoam on campus. This goal can be met through a few policy changes throughout campus.
 - Require food vendors allowed on campus to meet certain food packaging requirements. Thereby eliminating the Styrofoam and plastic containers students receive from food trucks.
 - Healthy food price anchoring. Encourage students to buy healthy food, which generally requires less packaging, by increasing junk food prices and decreasing the price of healthy food. When students see the two items side by side, they will naturally be more inclined to buy the cheaper item.

 Offer students healthier options for snacks. Healthy items are scarce on campus, and if made more available would provide students with a more sustainable option.

2. Energy Renewability.

a. Installation of solar panels in parking lots A and B.

3. Water Reduction

- a. Determine which areas on campus could benefit from the removal of grass and addition of native plants.
- b. Implement a "dry" bioswale suited for the Southern California climate.
- c. Create a plan to remove/ replace large fountain

4. Greenhouse Gas Affect

a. Create a ride share program for students. This program can be incentivized with cheaper parking permits. Need to create an online forum for students to interact and connect for carpool.

5. Sustainability Education

a. Work with administration and faculty to determine a curriculum, and possible transfer programs.