



# CLIMATHON SILVER CITY 2021

2811



2811

# LED BY 2811 AND UGWA

2811 is an international platform for social and ecological change, founded in 2016. Our global team supports universities and schools along the path to regenerative development through capacity building in the areas of social innovation, entrepreneurship, regenerative economics, and climate action. In the U.S. we are partnering with various New Mexico educational institutions to enhance climate change education.

*Upper Gila  
Watershed  
Alliance*



Upper Gila Watershed Alliance (UGWA) is a non-profit watershed protection and conservation organization working to promote the long-term health of the Upper Gila Watershed and its communities of life.

# OUR ALLIES

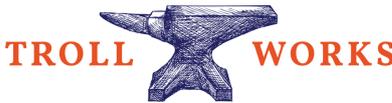
## ORGANIZERS



Co-funded by the European Union



## PARTNERS AND SPONSORS



## WHAT IS CLIMATHON?

Climathon is a city-based program that offers a path to action and interaction. It is an opportunity for citizens to co-create ideas that address local climate challenges. Its intent is to raise climate awareness, disrupt the status quo, and rethink the places we live in and the future we want as citizens.

In these 12-72 hour events, participants are facilitated through workshops and exercises to understand the selected environmental challenge and develop a solution to it that is innovative, yet feasible.

Climathon was born under the leadership of Climate-KIC, the largest program of the European Union for climate innovation. Climathon has taken place in 60 countries and 100 cities around the world simultaneously, and in its 7 years of execution, it has had the participation of more than 4,500 people who have contributed more than 600+ ideas for climate change.

## DEFINING THE CHALLENGE

For 20 years, Silver City residents have been trying to establish a sustainable composting system in town that includes businesses, restaurants, landscapers and other large producers of organic materials, yet all initiatives have failed to materialize.

New Mexicans have also been facing negative impacts resulting from climate change which threaten the integrity of their soil. Some of these impacts include stronger storms, reduced stream flow, more frequent drought, larger wildfires, dramatic change of the Gila National Forest, erosions from post-wildfire precipitation, and so on. These changes have made it increasingly important to act as stewards of the land and tend to depleted and degraded soil.

Climathon Silver City 2021 was proposed as an opportunity for residents to explore this local environmental challenge and answer to the existing interest and need among the town's residents. This year's challenge is therefore:

**How can we improve waste management systems to divert food waste, enhance community compost systems and provide nutritional soil for ecological restoration?**

## WHAT DOES COMPOSTING HAVE TO DO WITH CLIMATE CHANGE?

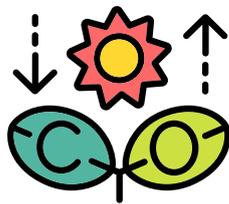
In landfills, organic matter is buried under piles of trash and is forced to decompose in anaerobic conditions. While the natural process of decomposition would normally turn organic matter into nutrient-dense soil that is essential for fertilizing plants, the lack of oxygen in landfills creates a process of decomposition that releases biogas as a byproduct. Biogas is made of 50% methane and 50% carbon dioxide, two of the most potent greenhouse gases contributing to global warming. As a result, food loss and waste account for 8.2% of total human-made greenhouse gas emissions.

### Reduces Greenhouse Gases



By putting organic wastes in compost bins instead of landfills, we can prevent anaerobic decomposition from occurring, thereby reducing methane & carbon emissions.

### Absorbs Existing Greenhouse Gases

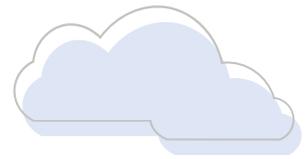


Compost enhances the productivity of our soil and increases carbon sequestration by introducing necessary nutrients for healthy plant growth.

### Increases Climate Resiliency



Each 1% increase of soil organic matter helps soil hold 20,000 gallons more water per acre. Compost plays an important role in helping prevent erosion during extreme storm events, and in retaining water during droughts.



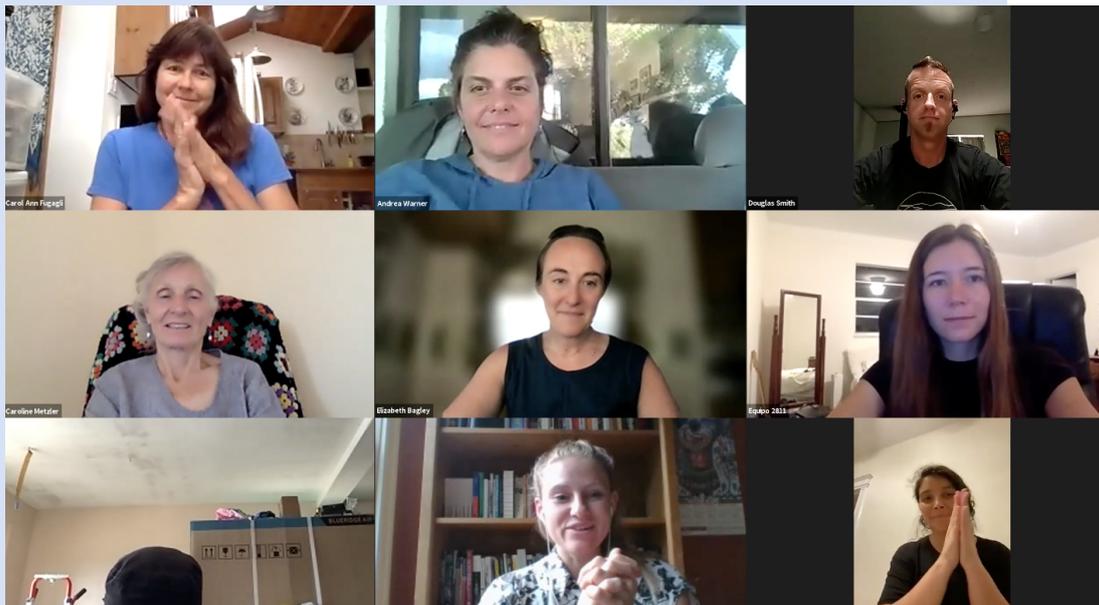
## EVENTS AND AGENDA

Climathon Silver City 2021 involved a series of events that culminated in one final main event: the Ideathon. The first was a virtual warm-up event on July 27th to introduce participants to the challenge, followed by an in-person event on July 30th with the purpose of exploring composting. Finally, the third and final day was the Ideathon on July 31st, which was entirely devoted to problem solving and preparing a prototype for the best way to manage the town's organic waste through composting.



## ***Kick-off event: Virtual Warm-up***

We kicked-off the Climathon with a virtual warm-up event on July 27th which was led by 2811, UGWA and Project Drawdown. The purpose of the call was to introduce participants to the challenge, and work with Elizabeth Bagley, director of 'Drawdown Learn' on Project Drawdown's approach to climate solutions. Participants were guided through an exercise to find their "ikigai", their sense of purpose, in relation to the composting challenge.



## ***Second event: exploring compost in the local context***

On Friday, July 30th, everyone came together to start the first in-person event at Western New Mexico University. Participants spent the day exploring composting how-tos and the larger framework of the challenge through workshops and site visits around Silver City.

### **Workshops**

*Workshop I.* Sarah Pierpont from New Mexico Recycling Coalition donated 25 plastic composting bins to the participants of the Climathon, and gave a demonstration of how to manage a backyard compost system using these bins.

*Workshop II.* Participants were given the choice to visit one of two sites: Caroline Metzler's regenerative permaculture site, or Silver City's neighborhood pantry, the Commons.



*Metzler's site, which boasts a plethora of edible plants including sweet potato, buckwheat, artichoke, plums, and thyme, is sustained by the strategic use of compost and mulch. In Metzler's guided tour, she described the process of making her compost and what the soil microbiome can do for plants and the environment.*

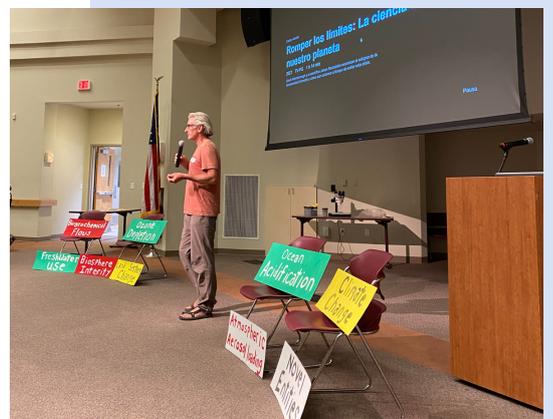


*Dave Chandler, Executive Director of the Commons gave a personal tour of the community gardens, food distribution centre, compost system, and a space Dave believes is suitable to collect and process compost.*

*Workshop III.* Grodon West, founder and CEO of Trollworks LLC, presented on the work they do developing biochar, a densified thermal fuel made of biomass feedstocks that has the capacity for carbon sequestration and landscape regeneration.

### **Movie Screening**

The evening closed with a screening of *Breaking Boundaries: The Science of Our Planet*, a documentary film presented by David Attenborough and Johan Rockstrom, a world-renowned scientist who urges the audience to recognize that humanity has pushed the Earth beyond the boundaries that have kept it stable.



## Third Event: The Hackathon

On Saturday July 31st, the day of the Hackathon, participants separated into 6 groups to tackle the challenge as a team, and devise a solution that meets the criteria the panel of judges would base their final vote on.



Since environmental challenges are cross-sectorial, and involve stakeholders with varying interests, they require a systemic approach. To aid participants in unpacking the different areas of the problem, they were given a set of exercises including an Empathy Map, Pentagonal Problem, and Stakeholder Map. These exercises allowed them to identify the components of the problem and gain deeper insight on how it impacts different groups of people. From 10:30am-2:00pm, all 6 groups worked tirelessly to prepare a solution that they could then summarize in a 5-minute pitch. The final presentations took place in the WNMU auditorium in front of a panel of 5 judges.

# MEET THE JURY PANEL



**GABRIELA CARRASCO**  
2811 DIRECTOR



**CAROL ANN FUGAGLI**  
UGWA EDUCATION AND  
OUTREACH DIRECTOR



**CHRIS LEMME**  
PRESIDENT OF SILVER CITY  
RECYCLES



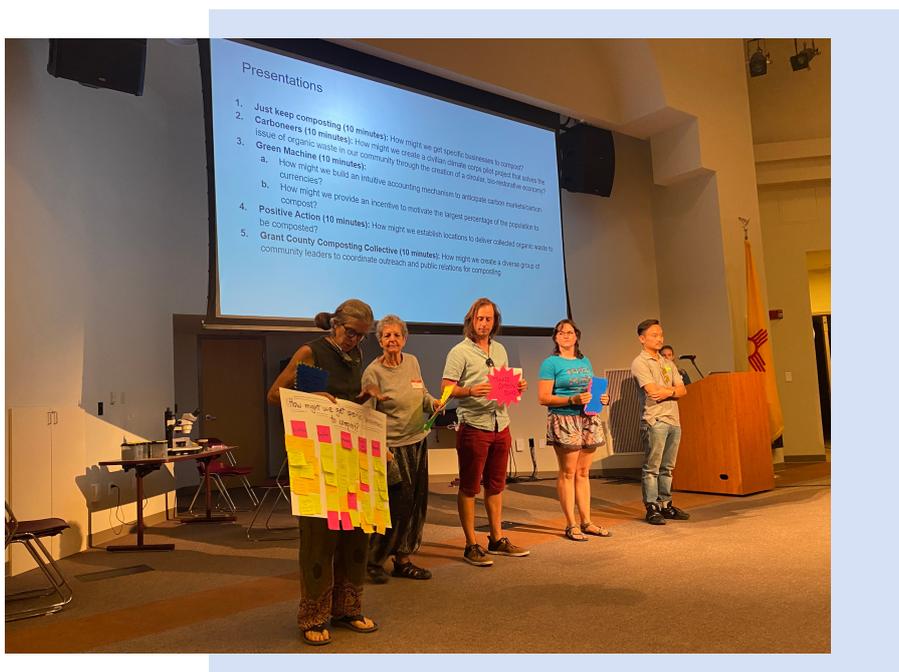
**NAN FRANZBLAU**  
MASTER COMPOSTER



**RAUL TURRIETA**  
GRANT COUNTY ASSESSOR

## Criteria:

1. *Progress: How far did the team advance during the climathon?*
2. *Innovation: What makes this solution better than previous community composting initiatives in Silver City?*
3. *Feasibility: How implementable is this solution?*
4. *Effectiveness: How well does the idea solve the challenge?*
5. *Sustainability: What is the business case for sustaining this solution financially?*
6. *Prototype: How good is the prototype as a validator for the idea?*



*'Just Keep Composting' present their prototype to the jury.*



## THE WINNERS

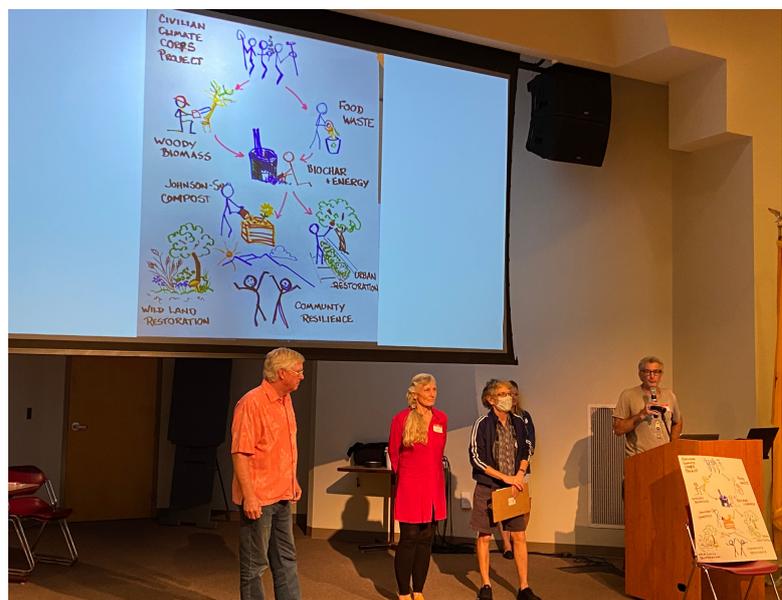
After achieving the same rating from the panel of judges, two teams, the 'Carboneers' and the 'Grant County Composting Collective', tied for first place and took home an \$800 award. The solutions that led them to victory are described below.

### 'The Carboneers' Project Summary:

The Civilian Climate Corps Pilot Program will create a circular bio-economy that transforms local waste biomass into carbon solutions.

The program will divert community food waste from the landfill and utilize surplus woody carbon materials to produce a biochar enhanced, fungal rich compost. This will be applied locally for wild land restoration, municipal edible landscapes, community and home gardens, and regenerative agriculture projects.

Research and educational aspects will empower participants with knowledge and skills for a hopeful future. This model will be scaleable for transfer to other communities while serving as a template for a national Civilian Climate Corps.





## THE WINNERS

### 'The Grant County Composting Collective' Project Summary:

The GCCC wanted to create a plan that could be implemented within days of the Climathon. They are in the process of creating a diverse coordinating committee that would help design and promote composting efforts in a way that maximizes community participation. Essential to this task is avoiding identifying these efforts with a narrow sector of the community (i.e. enviros or newcomers or downtown activist types), and instead choosing programs and outreach strategies that meet diverse needs and appeal to diverse values. To improve their odds of achieving this vision, the GCCC will be assembling a coordinating committee with diverse membership to receive suggestions for composting initiatives, provide feedback about them, select those most likely to succeed, and design/implement outreach efforts for them. The first step in assembling such a committee is to send out a Google Sheet to Silver City residents to brainstorm names of who should be considered for membership on this committee, and reconvening the Climathon attendees to evaluate the names that are suggested and to select a workable number to recruit.



## RESULTS



42 Participants



ideas presented

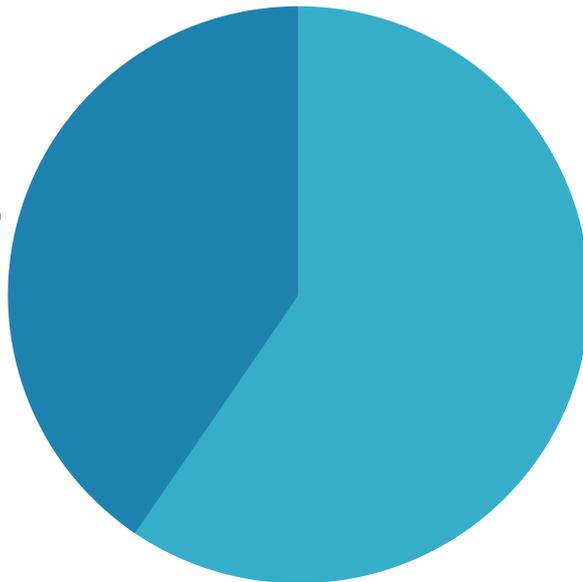


events



invited experts

Male  
40.5%



Female  
59.5%



Female = 25 persons and Male = 17 persons

Climathon

Silver City

# CLIMATHON SILVER CITY 2021

2811

[www.2811.cl](http://www.2811.cl)

Linkedin: @2811 | Twitter: @2811platform | Instagram:@2811platform

