



THRIVING CITIES CHALLENGE

The second annual Conservation
Impact Prize presented by

SALAZAR  **CENTER**
FOR NORTH AMERICAN CONSERVATION
COLORADO STATE UNIVERSITY





The Thriving Cities Challenge

In 2020, the Salazar Center for North American Conservation at Colorado State University launched its second annual Conservation Impact Prize, an incentive award designed to fund meaningful change in the field of conservation. Known as the Thriving Cities Challenge, this prize focuses on advancing and amplifying racial equity and BIPOC (Black, Indigenous, People of Color) leadership in North American cities, and it will support projects that use nature-based solutions to achieve climate resilience and community health outcomes.

The Salazar Center received 52 applications to the Challenge, representing a range of community-led efforts across the United States and Puerto Rico, Canada, and Mexico, as well as several Tribal nations and Indigenous groups. Teams proposed a variety of nature-based solutions—from reclaiming vacant and abandoned spaces, to improving local food systems, parks, waterways, streets, and alleys—to advance climate resilience and racial equity. The proposals received vary in geography, scale, and scope and address myriad challenges facing different communities.

The Challenge was designed to create a community of interest and to support all applicants, regardless of which teams ultimately win. After the application period closed in April 2021, all applicants received feedback from expert evaluators, including recommendations for strengthening their projects; and 15 finalist teams each received a \$10,000 capacity-building grant, as well as additional resources and training over the course of the summer. These finalist teams will participate in a pitch fest as part of the Center’s annual symposium in September 2021, and as many as five teams will be awarded funding to implement their ideas.

This booklet is designed, in part, to build the Thriving Cities communities of interest by providing exposure for each team who submitted a proposal. The pages that follow showcase each of the 52 submissions we received; they also illustrate the geographic diversity of the applicant pool and enumerate common themes across proposals. These pages are rich with innovative ideas from community leaders throughout North America, and while the Thriving Cities Challenge cannot fund every idea, we hope that the other teams and projects may find their own champions and investors through their inclusion here.

Why the Thriving Cities Challenge?

Our cities are facing the effects of climate change and confronting policies that often leave communities of color more vulnerable to the heat, rising seas, and extreme weather climate change brings. But there is hope: nature-based solutions can not only make communities more resilient to these changes, they can offer a range of additional benefits and improve the collective health of cities and their residents.

What is a nature-based solution? Nature-based solutions enhance, protect, restore, or make use of natural resources—such as trees, grasslands, or waterways, just to name a few. Nature-based solutions are implemented to address challenges, provide benefits to communities, and support local biodiversity. Examples of nature-based solutions include rewilding a vacant lot to provide more green space in an urban setting, restoring natural wetlands or vegetation to reduce the impact of flooding, or increasing tree canopy to reduce heat island effect.

Yet there is no perfect solution for every city in North America to adapt to the challenges posed by climate change, or for every city to tackle these challenges equitably and inclusively. We believe that the way a city approaches these challenges is unique to its community members, its leaders, and its geography, and that those most affected must lead the charge for change. Accordingly, the Challenge invited proposals that envision transformational change unique to the place and the people that a project is intended to serve. Some of the solutions proposed in response to the Challenge are focused on urban tree canopy, stormwater quality, or access to rivers, not every team's ideas converge around infrastructure. We encouraged teams to use this prize as an opportunity to explore out-of-the-box solutions, such as new ways to gather or apply data, finance projects, engage residents, or form partnerships.

Knowing that good ideas can start small, the definition of “city” for the purposes of this Challenge was also left up to our applicants. They told us what scale makes the most sense for their unique place, whether that's a town, a district, a village, a province, a territory, a broader metro region or urban county, or a neighborhood or other distinct community.

Critical to the Salazar Center's mission to share and advance best-in-class conservation solutions, teams were encouraged to submit ideas that could have broader application or relevance for other communities. Some projects may ultimately be scaled up in their community of origin, or translated to another locale. Others may provide valuable lessons learned and add significant knowledge and rich resources to the community of interest.



Evaluation Panel Members

Kim Moore Bailey

Chief Executive Officer, Youth Outside

Kristin “Baja” Baja

Programs Director, Climate Resilience, Urban Sustainability Directors Network

Aditi Bhaskar

Assistant Professor, Colorado State University

Curtis Bennett

Director of Equity and Community Engagement, The National Aquarium

Anne Castle

Senior Fellow, Getches-Wilkinson Center for Natural Resources, Energy, and the Environment, University of Colorado Law School

Molly Chafetz

Program Officer and Grants Manager, Telluray Foundation

Ronda Lee Chapman

Director of Equity, The Trust for Public Land

Sarah Charlop-Powers

Executive Director, Natural Areas Conservancy of NYC

Anjali Thavendran Chen

Senior Advisor, The Perception Institute

Amy Chomowicz

Governance Policy Analyst, City of Portland Bureau of Environmental Services

Cinceré Eades

Parks Resiliency Principal Planner, Denver Parks and Recreation

Iñaki Echeverria

Director, Parque Ecologico Lago de Texcoco

Ryan Finchum

Co-Director, Center for Protected Area Management, Colorado State University

Michael Fodor

Project Manager, Emerald Built Environments

Sasha Forbes

Director of Community Collaboration and Policy, Healthy People and Thriving Communities Program, Natural Resources Defense Council

Rick Garcia

Executive Director, Colorado Department of Local Affairs

Liba Pejchar Goldstein

Associate Professor, Colorado State University

Allegra “Happy” Haynes

Executive Director, Denver Parks and Recreation

Jocelyn Hittle

Assistant Vice Chancellor, Spur Campus & Special Projects, Colorado State University System

Sam Houghteling

Program Director, CSU Straayer Center for Public Service Leadership

Benita Hussain

Former Director, 10 Minute Walk Campaign

David Lamfrom

Vice President-Regional Programs, National Parks Conservation Association

Stephanie Maez

Managing Director, Outdoor Foundation

Laura Martinez Pepin Lehalleur

Director of the Water Program, Gonzalo Río Arronte Foundation

Teresa Martinez

Executive Director, Continental Divide Trail Coalition

Melissa McHale

Associate Professor, Colorado State University

Thaddeus Pawlowski

Managing Director, Center for Resilient Cities and Landscapes, Columbia University

Jim Petterson

Colorado & Southwest Region Director, The Trust for Public Land

Patrick Phillips

Former Global CEO, Urban Land Institute

Martha Records

Managing Partner, Green Spark Ventures

Vivek Shandas

Professor, Portland State University

Ana Soler

Senior Program Officer, Education, Gates Family Foundation

Divya Sridhar

Manager of Climate Resiliency and Sustainability, Cleveland Neighborhood Progress

Bruce Stein

Chief Scientist and Associate Vice President, National Wildlife Federation

Becky Takeda-Tinker

Chief Educational Innovation Officer, Colorado State University System

Kate Trujillo

Director of Programs, Honnold Foundation

Sarita Turner

Center Director, Department of Housing and Urban Development (HUD), Office of Fair Housing and Equal Opportunity, Region III

Steven Whitney

Senior Program Officer, Bullitt Foundation

Kelly Yamasaki

Principal, LEED AP, OZ Architecture

52 proposals spanned the United States, Canada, and Mexico.



1. A Community Energy and Food System (CEFS) as a plan to improve resilience in vulnerable communities, **Accionética and Tecnológico de Monterrey, Design for Vulnerable Initiative**

2. Fare Farms Initiative, **Afro Van Connect Society**

3. Sacramento National Park City, **Alchemist Community Development Corporation**

4. I am Islais: Visions for Environmental Justice Now!, **Architectural Ecologies Lab, California College of the Arts**

5. Hacking the Sargassum Problem: A Nature-based Solution to Re-Ignite the Economy and Environment, **AREA Research**

6. Connecting Canopies regional urban forestry conservation collaboration, **Blueprint Foundation**

7. Alley Activation as a Neighborhood-Based Sustainability Strategy, **Canfield Consortium**

8. Regenerative Dinétah initiative - Food-Water-Energy-Shelter-Land Sovereignty through Collectivism, **Collective Medicine**

9. The Mindful Pocket Park Project, **Community Reinvestment Alliance North Miami**

10. Meet Our Guani River, Project of the Citizens of Pátzcuaro for its Recovery, **Consejo Ciudadano de la Región Lacustre de Pátzcuaro**

11. Empowering Community-Based Organizations for Green Infrastructure Planning and Development, **Council for Watershed Health**
12. Engaging Denver Communities in Taking Action For The Birds, **Denver Audubon**
13. Community-led nature-based solutions to restore environmental/ climate justice in the Duwamish Valley, **Duwamish River Cleanup Coalition**
14. Bridging the rural-urban divide through community wealth building, food sovereignty, and economic justice, **East Denver Food Hub**
15. Building Climate and Economic Resilience through Kelp Farming in Southeast Alaska, **Ecotrust**
16. Anchoring Community, Resilience, and Equity through Rogell Park, **EcoWorks**
17. Connecting the C's: Color, Class, Climate, Conservation, and Collaboration for a Thriving Community, **Education, Economics, Environmental, Climate and Health Organization (EEECHO)**
18. Veterans' Memorial Park Expansion Project - Vegetative Borders, **Elgin, Texas Main Street Board**
19. Rooting & Blooming: Cultivating a Fruitful Commons at Festival Beach Food Forest & Community Garden, **Festival Beach Food Forest**
20. Equitable Engagement in Climate Resiliency through the Albuquerque Backyard Refuge Program, **Friends of Valle de Oro National Wildlife Refuge**
21. Addressing Climate Injustice through Community-led, Nature-based Solutions, **GreenRoots**
22. Resilient Bridgeport: Individual Actions, Collective Impact, **Groundwork Bridgeport**
23. Harlem Grown's 127th St. Compost Annex, **Harlem Grown**
24. Regenerating Our Roots - a Bi-State Approach to Equitable Climate Resiliency, **Heartland Conservation Alliance**
25. Summit for Empowerment Action & Leadership 202, **Heirs To Our Oceans**
26. Community Impact, **Lincoln Hills Cares**
27. Resilience Ecology Shade Transit (REST) Stops for Community Climate Justice, Resilience, and Health, **LINK Houston**
28. The Urban Forest Project: A Living Lab for Nature-Based Learning, **Local First Arizona**
29. Climate Champions: Engaging residents to develop place-based, nature-based solutions to displacement, **Mile High Connects**
30. CulebraComposta, **Mujeres de Islas**
31. From Redlining to Green: Natural Solutions through Small Business Leadership, **National Wildlife Federation**
32. Develop Alternate Funding Models for Natural Areas Restoration and Management, **Natural Areas Conservancy**
33. Progress Village Fountain Project, **Progress Village Civic Council**
34. Montetik: The wooded crown that protects San Cristobal de Las Casas, a magical city, **Pronatura Sur**
35. Full Circle Farms, **Reunity Resources**
36. Nature-based solutions for equitable mental health care and eco-civic engagement in Denver, **Rising Routes**
37. Climate Adaptation and Habitat Restoration Project, **Rocky Mountain Youth Corps**
38. Biodiversity Without Borders: International Pollinator Club, **San Antonio River Foundation**
39. C.O.L.O.R.S. - Creating Outdoor Leadership through Outdoor Recreation & Sports, **Sierra Club Foundation**
40. Urban Oases, a natural-based solution to be a resilient and sustainable city that can be enjoyed, **Sociedad de Historia Natural Niparaja**
41. Mycelium Healing Project, **Spirit of the Sun**
42. Building Underpass Greenways (BUG): A Micro-Pilot Demonstration Combating Polluting Infrastructure, **THE POINT Community Development Corporation**
43. Growing Pocket Forests for Climate Resilience, **TreePeople**
44. Catalyzing Watershed-Scale Change and Preserving Puebloan Lifeways in the Middle Rio Grande Corridor, **Trees, Water & People**
45. Witness Trees, **Turner Station Conservation Teams**
46. Creating Microgreen Urban Farm Projects to Promote an Equitable and Livable City: The Shaw Community, **Unique Learning Center**
47. Cultivating Climate Resilience: Gardens & Greenhouses in Saint Paul's Rondo and Frogtown, **Urban Farm & Garden Alliance**
48. Cleveland's Urban Tree Hub, **Western Reserve Land Conservancy**
49. Utah Pollinator Pursuit: Connecting Pathways for Pollinators and People, **Wild Utah Project**
50. Community-based mangrove conservation in Baja California Sur, Mexico, **WILDCOAST**
51. Restoring coastal dunes that protect communities, **World Wildlife Fund**
52. NYC Foodways Collective, **Youth Ministries for Peace and Justice**



THRIVING CITIES CHALLENGE FINALISTS

Connecting Canopies regional urban forestry conservation collaboration

Blueprint Foundation - *Portland, Oregon*



Alley Activation as a Neighborhood-Based Sustainability Strategy

Canfield Consortium - *Detroit, Michigan*



Empowering Community-Based Organizations for Green Infrastructure Planning and Development

Council for Watershed Health - *Los Angeles, California*



Anchoring Community, Resilience, and Equity through Rogell Park

EcoWorks - *Detroit, Michigan*



Connecting the C's: Color, Class, Climate, Conservation, and Collaboration for a Thriving Community

Education, Economics, Environmental, Climate and Health Organization (EEEECHO) - *Gulfport, Mississippi*



Rooting & Blooming: Cultivating a Fruitful Commons at Festival Beach Food Forest & Community Garden

Festival Beach Food Forest - *Austin, Texas*



Equitable Engagement in Climate Resiliency through the Albuquerque Backyard Refuge Program

Friends of Valle de Oro National Wildlife Refuge - *Albuquerque, New Mexico*



Addressing Climate Injustice through Community-led, Nature-based Solutions

GreenRoots - *Chelsea, Massachusetts*



Resilience Ecology Shade Transit (REST) Stops for Community Climate Justice, Resilience, and Health

LINK Houston - *Houston, Texas*



From Redlining to Green: Natural Solutions through Small Business Leadership

National Wildlife Federation - *Denver, Colorado*



Montetik: The wooded crown that protects San Cristobal de Las Casas, a magical city

Pronatura Sur - *San Cristobal de Las Casas, Chiapas, Mexico*



Catalyzing Watershed-Scale Change and Preserving Puebloan Lifeways in the Middle Rio Grande Corridor

Trees, Water & People - *Middle Rio Grande urban corridor, New Mexico*



Witness Trees

Turner Station Conservation Teams - *Baltimore, Maryland*



Cleveland's Urban Tree Hub

Western Reserve Land Conservancy - *Cleveland, Ohio*



NYC Foodways Collective

Youth Ministries for Peace and Justice - *Bronx, New York*



Urban
farming/food
production

Parks/
green space
revitalization

Urban
forestry

Indigenous
leadership

Urban
watersheds

Community
development

Outreach/
education

Policy
approaches



Connecting Canopies regional urban forestry conservation collaboration

**Blueprint Foundation
Portland, Oregon**

As in many cities across the country, Portland's BIPOC and low-income communities tend to be concentrated in neighborhoods with less tree cover that experience higher air temperatures, lower air quality, and reduced health outcomes as compared to residents from wealthy, well-treed, and whiter neighborhoods. These environmental injustices are exacerbated by rapid development, gentrification, and displacement, while at the same time, poverty and disinvestment undermine residents' perceived benefits of trees—which are frequently viewed as a liability due to the financial burden of maintenance.

What is more, volunteer tree planting programs mostly benefit neighborhoods and families with higher incomes, while the rest of the neighborhoods remain under-treed. The Connecting Canopies team has proposed a regional urban forestry collaboration among city partners, conservation organizations, and BIPOC organizations to expand urban tree canopy, mentor and employ BIPOC youth and community members as tree stewards, and support municipal investment, planning, and action for trees.

Over the next two years, the project team will share knowledge and resources through quarterly forums, and convene a diversity of local organizations including regional municipalities, BIPOC community-based organizations, and other health and nature-focused nongovernmental and municipal agencies. The team will also use a chartering process to formally establish a sustainable and impactful collaborative that will work toward environmental/climate justice goals and workforce/movement

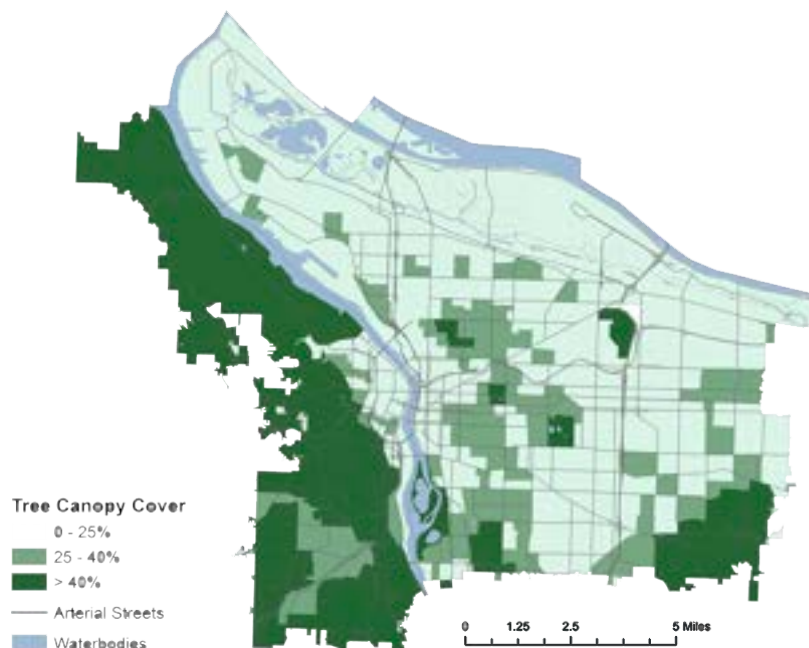


diversification, identify funding opportunities, and develop a regional urban forestry strategy.

The collaborative will explore workable solutions to increase the capacity of community-based organizations to access public and private investments in order to lead neighborhood-level action. The project team has also proposed to create a youth career development program with an urban forestry and equity training curriculum and, ultimately, train and provide stipends for as many as 30 BIPOC youths each year. Throughout, the team will gather and collate community feedback, and all participants will receive a stipend for their time and input.

In the long term, this team hopes Connecting Canopies will provide a model for linking BIPOC community learning, employment, and advocacy for enhanced spending on urban tree canopy and to support public-private regional partnerships for local action.

Learn more about the Blueprint Foundation at theblueprintfoundation.org, and watch the [team's proposal video](#).





Alley Activation as a Neighborhood-Based Sustainability Strategy

Canfield Consortium Detroit, Michigan

Alleys are a common form of urban infrastructure that have historically had a clear purpose—such as trash collection, alternative entry to residences, storage, or as a conduit for electrical and telephone service lines—with these spaces also informally used as walking and bike paths, playgrounds, and meeting spaces. The City of Detroit stopped maintaining alleys in the late 1980s, granting control to homeowners and relying on residents to maintain the spaces. Since then, however, due to lack of resources and declining population, many of the city’s alleys have devolved into untended spaces associated by many residents with blight and disorder.

In 2020, Detroit began investing in the large-scale clearance of alleys. As these alleys are cleared and come back into use, they open up opportunities for economic, environmental, and social innovation. The value of urban alleys as a source of sustainability solutions is an emerging area of research and practice, but in the past, green infrastructure projects in Detroit have lacked attention to social equity and political inclusion in decision-making. Sustainability efforts are often pursued without regard to their implications for social equity or without incorporating local knowledge of social and physical environments. In the absence of community representation, green space investments may re-entrench preexisting inequalities.

Initiated by neighborhood residents and centered on their ideas, skills, and talents, Canfield Consortium’s proposed project aims to address this issue of equity. The team proposes that newly cleared



alleys be activated to serve as a green capillary system that significantly contributes to municipal sustainability goals as well as neighborhood cultural, social, and economic life. This pilot project will serve as a small-scale proof-of-concept, advancing the real-world application of sustainable technology by using a designated alleyway to serve as an open-air learning laboratory and demonstration site.

The team will work closely with partner organizations, such as University of Michigan-Dearborn, the Wildlife Habitat Council, and DAVIS (Detroit Ain't Violent It's Safe), as well as local residents, to re-engineer the alleyway as a flexible platform for integrating recycling, upcycling, green energy, composting, and rainwater harvesting with community-driven, place-making goals. Participants will gather primary data on the platform's outcomes, such as stormwater management, off-grid energy production, and social engagement. The project will also map and model its potential extension throughout Detroit's extensive alleyway network, projecting the environmental, social, and economic benefits to both local communities and city government if alley activation is implemented on a citywide scale.

Learn more about Canfield Consortium at canfieldconsortium.org, and watch the [team's proposal video](#).





Empowering Community-Based Organizations for Green Infrastructure Planning and Development

Council for Watershed Health Los Angeles, California

According to state definition, 32 percent of California’s population—or about 12 million people—qualify as living in a “disadvantaged community.” Of those, approximately four million live in the Greater Los Angeles area. These dense communities in Greater Los Angeles suffer from a lack of open space, exposure to toxic hazards, poor air quality, localized flooding, poor public health, and poor surface water quality. Investments in green infrastructure projects are a vital tool in addressing these challenges.

In the years ahead, the County of Los Angeles will see an investment of billions of dollars in parks and stormwater infrastructure projects intended to create climate resiliency and improve the health of urban forests and watersheds. There are many community-based organizations (CBOs) eager to initiate these projects throughout the region. Many of these organizations are well respected in their communities and can effectively educate and engage their constituents in project development. However, many also lack knowledge about the solutions and best practices for climate, water, and urban forests, such as how to identify site-specific climate-adaptive design responses that ensure community resiliency. Engineers, architects, and landscape planners possess these skills and expertise—but because of the siloed nature of these industries, they are often unable to reach communities effectively.

In response to this disconnect, this team’s proposed program will develop the long-term capacity of local stakeholders using a CBO mentor-mentee model to redesign neighborhoods, schools, and



communities to achieve relevant social impacts in health and safety through water resources. For over 20 years, the Council for Watershed Health has conducted science-based research to inform green infrastructure projects, and they will use this knowledge base to lead education, engagement, and technical assistance in partnership with three local CBOs.

The team will serve as mentors and provide technical assistance and capacity-building support to mentees to implement green infrastructure projects within under-served communities across the Los Angeles region. The project team will identify two communities that can benefit from investment in nature-based solutions and climate resiliency, and will work with them to develop well-conceived solutions that address county-wide water issues while supporting community-driven priorities.

Learn more about Council for Watershed Health at watershedhealth.org, and watch the [team's proposal video](#).





Anchoring Community, Resilience, and Equity through Rogell Park

EcoWorks Detroit, Michigan

In 2018, the City of Detroit purchased Rogell Park—a 98-acre, undeveloped green space (formerly a golf course) at the intersection of five distinct neighborhoods—to manage stormwater runoff for neighboring communities. These communities suffer from environmental injustices endemic to a post-industrial city, such as air and soil pollution, overburdened stormwater infrastructure, increased exposure to extreme heat, and lack of access to safe green space. Climate change threatens to exacerbate these injustices. Today, Rogell Park represents an opportunity to build climate resilience through stormwater management and carbon sequestration, reduce pollutants through soil amendments, and provide critical access to green space for recreation and connections to nature. It also offers an opportunity to build equity through community-ownership of design and programming.

This team aims to implement “(socially) just greening” strategies by supporting a community-led redevelopment of the park. It also hopes to build equity through “green reparations” by pursuing deep collaboration and coalition-building among neighborhood groups and responsive, nature-based solutions to environmental injustices and climate threats. Under the guidance of the Berg-Lahser Community Association, the team has proposed to build a coalition of community leaders from each of the five neighborhoods surrounding Rogell Park, prioritizing community-led planning for the development, programming, and maintenance of the park.

This community-driven redevelopment of the park is also an opportunity to reduce the impacts of climate change and support the distribution of nature-based climate solutions to residents in District 1. With the support and technical expertise of the City Planning Department, green stormwater infrastructure will be installed, taking advantage of the natural landscape to divert and detain stormwater during heavy rain events. As Rogell was formerly a chemical-intensive golf course, EcoWorks will support soil amendments through innovative remediation and carbon farming programs. Under the guidance of community members, partners will promote increased knowledge of and connection to nature and nature-based climate solutions among local residents. EcoWorks will also coordinate the distribution of resources to immediate community members who are interested in applying nature-based climate solutions in their homes or neighborhoods. In the long term, the team plans to position this strategy as a model of green reparations for other green space redevelopment projects across Detroit, and beyond.

Learn more about EcoWorks at ecoworksdetroit.org, and watch the [team's proposal video](#).





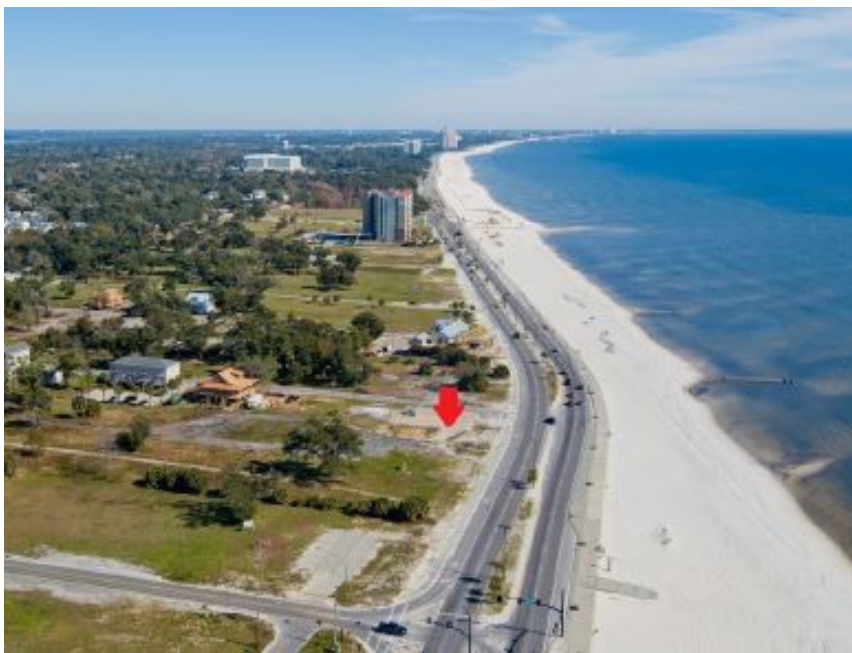
Connecting the C's: Color, Class, Climate, Conservation, and Collaboration for a Thriving Community

Education, Economics, Environmental, Climate, and Health Organization (EEECHO) Gulfport, Mississippi

Residents of Gulfport's Turkey Creek and Forest Heights neighborhoods face a long history of environmental degradation perpetuated by zoning established in the 1930s, when lands in and around Black neighborhoods were zoned for industrial activity. For more than 80 years, the area has faced high exposure to air, water, and noise pollution, generating severe public and ecosystem health issues. Further, poor state-level permitting processes that rely on local zoning have done little to prevent damage. The environmental degradation is expected to worsen with climate change, with Hurricane Ida flooding the community in 2021.

This crisis may lead to communities being cut off in access to services, cause expensive structural damages, and negatively impact home values while driving up flood insurance prices. Until the zoning is addressed and permitting processes become more rigorous, the Turkey Creek watershed and its inhabitants will continue to bear an excessive burden amplified by climate change.

This team proposes enhancing local conservation of critically important coastal and watershed habitats by addressing systemic barriers. Specifically, EEECHO will begin efforts to comprehensively improve local zoning and the Mississippi Department of Environmental Quality permitting process, with the goal of addressing policies and laws that force local conservation and community organizations to battle individual



industrial development threats rather than holistically nurturing their ecosystem. They will develop a strategic educational campaign to ensure that community residents and local government officials understand the issues and options.

Educational activities will capture the history and legacy of racist practices that led to the current zoning, and impart an understanding of how zoning impacts not only environmental health, but community health, economic opportunity, and resilience. The educational efforts will span a multitude of audiences, including residents of Turkey Creek and Forest Heights, students in Gulfport, city elected officials, state legislators, and local, state, and federal agency officials. Concurrently, EEECHO will continue its work to prevent new development proposals that could cause harm, including informing federal agencies, testifying in court, and petitioning relevant agencies.

Learn more about EEECHO at eeechogulfport.wixsite.com, and watch the [team's proposal video](#).





Rooting & Blooming: Cultivating A Fruitful Commons At Festival Beach Food Forest & Community Garden

Festival Beach Food Forest Austin, Texas

Austin is a rapidly growing city with interconnected affordability, gentrification, displacement, food insecurity, and climate crises disproportionately affecting communities of color, including the historically Tejano/Chicano East Cesar Chavez neighborhood. The Rebekah Baines Johnson Tower is an anchor of affordable housing for elders and people with disabilities in this area, and it is currently expanding into a multi-use complex called “The Hatchery” that will double affordable housing units from 250 to 500. Directly next to this property are the Festival Beach Food Forest and Community Garden, a CapMetro bus stop, and access to the 10-mile Ann and Roy Butler Hike-and-Bike Trail around Ladybird Lake. This site is strategically located to serve an area with the greatest need, and the Tower’s guaranteed affordable housing will help the team avoid pitfalls of environmental gentrification.

This project aims to transform this parkland where Festival Beach meets The Hatchery into a thriving community nexus for climate justice focused on abundant, free, healthy, and hyper-local food access—a critical need, as an estimated 43 percent of residents experience food insecurity. The project will also center cultural celebration and preservation, nature education, and regenerative land stewardship.

To date, the project team has already tested a pilot project, transforming a former brownfield into a lush and biodiverse edible forest garden.



Now, they aim to expand to their impact to create a thriving community resilience hub throughout the entire Festival Beach + Hatchery campus. If funded, the team will be able to hire paid staff for community organizing, site management, and assessment. The team plans to increase the size of the pilot food forest to more than five times its current footprint—producing more food to be distributed to the community in partnership with the Serefina Food Pantry while regenerating soil, restoring watersheds, and reserving carbon in a hot spot of food insecurity. The project will incorporate a paseo (pathway) filled with artwork honoring the neighborhood's Tejano heritage that weaves throughout the campus, and a multi-use community pavilion for outdoor learning, tool and seed storage, a teaching kitchen, and picnicking. What is more, by expanding the food forest and collaborative partnerships with Festival Beach stakeholders, this project will be on the leading edge of Austin's Climate Equity Plan, providing a model for nature-based solutions for thriving and equitable cities.

Learn more about Festival Beach Food Forest at festivalbeach.org, and watch the [team's proposal video](#).





Equitable Engagement in Climate Resiliency through the Albuquerque Backyard Refuge Program

Friends of Valle de Oro National Wildlife Refuge Albuquerque, New Mexico

The Southwestern US is warming at four times the global rate, and Albuquerque's existing heat island effect and frequent droughts will amplify the impacts of our changing climate. This project team's goal is to support its local community in achieving shared climate resilience goals through the creation of a neighborhood network of drought-tolerant wildlife gardens and green infrastructure.

At present, the Backyard Refuge Program is supporting Albuquerque communities with access to green space and resources, helping them create pockets of drought-tolerant habitat in yards, patios, and apartment balconies. The program, however, was originally established to address larger environmental justice issues and build stronger, more resilient communities—and it is poised to expand. Its new potential is further strengthened by a recent Climate Action Planning process by the city, during which residents expressed that climate mitigation actions should have a commitment to equity, inclusion, and accessibility, with decisions made and acted up in partnership with frontline communities.

The proposed project will provide early, meaningful, and ongoing opportunities for participation in climate resiliency, especially within high impact, low-resource communities. For example, the prevailing norm of using rock mulch as a ground cover retains and reflects heat, exacerbating the problem. By advocating for organic mulch, and native



plantings that also provide wildlife and pollinator habitat, the team can work directly on the source of Albuquerque's heat problem.

This intervention will alleviate stress on local water sources by reducing water use while providing opportunities for groundwater recharge through stormwater management. The program will also support communities to create pocket gardens to meet shared resilience and health objectives. If funded, the team will gather additional targeted input to inform the design of community-aligned and resilient program elements, such as community mapping and the creation of an interactive platform designed to enable geographically-strategic targeting of resources. The team also hopes to support a local youth corps, that will develop skills while working to engage local communities in the Backyard Refuge Program. Ultimately, implementing a community-driven expansion of Albuquerque's network of habitat patches will increase the city's climate resilience, mitigate heat island effects and enhance stormwater control and utilization, while enhancing equitable access to green space.

Learn more about Friends of Valle de Oro at friendsofvalledeoro.org, and watch the [team's proposal video](#).





Addressing Climate Injustice Through Community-Led, Nature-Based Solutions

GreenRoots Chelsea, Massachusetts

Current land use in Chelsea is a direct consequence of historic redlining. More than 60 percent of the existing housing stock in residential parcels was redlined in 1938 and now contributes to the community's high ratio of impervious surfaces, an absence of open green space, and below-average tree canopy cover—all of which strain the City's stormwater system and exacerbate the urban heat island effect, with Chelsea often averaging 20-40 degrees higher than nearby Boston suburbs. Gasoline, diesel, ethanol, and other petroleum products are stored in massive tanks near extremely low-income black, Indigenous and people of color (BIPOC) neighborhoods. Heavy industry, major roadways, and Logan Airport's flight paths create toxic air for residents to breathe, making Chelsea's air quality among the worst in the state. Extreme heat, predicted sea-level rise, and flooding compound these climate and public health crises.

In the summer of 2020, an innovative, cross-sector partnership emerged to address these challenges, bringing together the environmental justice organization GreenRoots, the City of Chelsea, the Boston University School of Public Health, and local foundations. The immediate success of this inspiring partnership led to the installation of eight hydration stations in the community.

Now, the team has proposed to build on this past success by implementing a nature-based pilot to reduce heat, improve air quality, and provide a green oasis in an ultra-urban, heat impacted



neighborhood. Residents will work together with partners and pro-bono landscape design consultants to design and install a green space that can serve as a heat/carbon sink, transforming a vacant lot into a cool green respite with trees, plantings, shade structure, and benches. Pre- and post-monitoring and surveying with neighborhood residents will determine the use and benefits of this demonstration projects, and heat index data-gathering and mapping will be youth-led with the Environmental Chelsea Organizers Youth Crew, in partnership with the University. The project team will conduct multilingual community outreach to connect residents in heat-vulnerable neighborhoods to cooling solutions, with the goal of developing community-based leadership on intervention strategies, greenspace design, and other cooling ideas.

Ultimately, the team's model will use diverse resident-led heat interventions paired with community-led data analysis to identify future policy and program interventions to make this project replicable.

Learn more about GreenRoots at greenrootschelsea.org, and watch the [team's proposal video](#).





Resilience Ecology Shade Transit (REST) Stops For Community Climate Justice, Resilience, And Health

LINK Houston Houston, Texas

Houston residents face many transportation-related challenges, including systemic health disparities, inequitable transit choices, climate-change-exacerbated flooding, environmental degradation, and extreme heat hazards intensified by urban heat islands. Low-income and BIPOC communities—more than three million of 4.5 million residents in the Houston metro area—experience the greatest impacts of these intersecting issues. Many of these residents rely on affordable transportation, such as walking, rolling, biking, and riding local transit to access opportunity, and are as a result most exposed to harm.

To address this problem, the REST program proposed by this team will harness genuine community-based participatory research, planning, and implementation to identify where and how to create more resilient, healthy bus stops. The team aims to improve bus stop design, planning and development in people- and nature-centered ways. First, the team will identify priority BIPOC transit-riding communities, using socio-economic, transit ridership, urban heat island, and high-resolution LiDAR tree canopy shade data, along with a review of existing community plans.

Building on this data collection effort, the team will conduct community-based participatory research in 2-3 priority communities to identify resident preferences for on-the-ground changes around bus stops, such as shade structures for urban heat, green stormwater mitigation, green space equity, support for natural biodiversity, and climate-friendly travel



improvements. Once community priorities for REST projects are established, the team will support community-led projects in the form of either a pilot program or a friendly competition involving mini sub-grants from the project team—a process that will foster learning and opportunities to test aspects of the emerging REST models.

Ultimately, the team will synthesize all of this information into action-oriented tools with clear ties to existing community plans and local/regional/state funding mechanisms, and provide a power map for community members to seek change. If funded, these project outcomes will empower communities in Houston as well as provide an accessible and equitable template for other regions to promote climate resilience and racial equity in their transit networks; and through this community-driven approach, will provide a clear case study of how to successfully achieve a delicate balance between a community's needs and applied outcomes.

Learn more about LINK Houston at linkhouston.org, and watch the [team's proposal video](#).





From Redlining to Green: Natural Solutions through Small Business Leadership

**National Wildlife Federation
Denver, CO**

Denver's Five Points neighborhood has been dominated by manufacturing and rail industries since it was founded in the 1860s. The historic neighborhood was the first predominantly African American community in Denver, and the area has been shaped by redlining and disinvestment that has exacerbated the lack of green space, heat island effects, lack of sidewalks, low tree canopy, and impervious surfaces. The Five Points area has a high heat vulnerability index, characterized by less than 15 percent tree canopy coverage—one of the lowest impervious surface ratings in Denver—and less than two acres of parks for every 1,000 residents, compared to a City-wide average of 7.14 acres. These issues affect all residents and visitors to Five Points, especially the predominantly BIPOC long-term residents who also face displacement and gentrification.

To address this challenge, the National Wildlife Federation is partnering with False Ego, a Black-owned small business in Five Points, as well as a property developer, the University of Colorado Denver, and Denver Botanic Gardens. The team has proposed to pilot on-the-ground, publicly-accessible demonstration projects in the River North (RiNo) district of Five Points that incorporate more trees, permeable surfaces, and native/xeric gardens.

These demonstration sites will restore pollinator-friendly, water-smart, and climate-resilient greenery in the neighborhood; highlight to local business leaders how they too can transform their own spaces within



the community; and serve as a model for other communities, in Denver and beyond. In parallel, the project team will actively build relationships with other BIPOC communities in Denver to learn their values and vision for incorporating more greenery, and they will work with the City of Denver to identify barriers and formulate strategies to navigate them or advocate for policy changes to reduce their impact. Informed by these outreach efforts, the team will develop a toolkit for businesses to implement their own green infrastructure solutions and to navigate city processes or policies. If funded, this project will bridge the gap between urban land use practices and community needs by transforming business's public spaces.

Learn more about National Wildlife Federation at nwf.org, and watch the [team's proposal video](#).





Montetik: The Wooded Crown That Protects San Cristobal De Las Casas, A Magical City

Pronatura Sur

San Cristobal de Las Casas, Chiapas

The community of San Cristóbal faces interrelated challenges at the intersection of water and population growth. Water has historically infiltrated through the surrounding mountains and flowed downstream to the San Cristóbal community, but more than 50 percent of the mountains' historic ecosystem has been lost to urban growth, illegal logging, and stone material extraction for construction. Coupled with regional climate change—particularly severe drought and flood events—this human-driven activity threatens groundwater wells, and San Cristóbal is facing a significant decrease in the quantity and quality of available water.

To combat this problem, Pronatura Sur is partnering with the El Aguaje Indigenous community, the municipal government of San Cristóbal, and a network of natural reserves in Valle de Jovel to better conserve the local mountain ecosystem. The El Aguaje are long-term stewards of the local forests and have been working for decades to conserve water and forest resources to the benefit of all people who live downstream in San Cristóbal.

This team's proposed project will formalize the El Aguaje's conservation efforts by instituting legal protections for these local forests, including the Montetik Ecotourism Park. In addition to providing protection for more than 800 hectares (nearly 2,000 acres) that connect several private reservations and are highly important for water capture and weather regulation, the project will restore altered areas of the forest, train community guides and monitors, and implement a public awareness



campaign to increase understanding of the community's role in supporting resilient water resources and ecosystem services in the city.

The El Aguaje Indigenous community will also benefit from the formal protections, which will improve infrastructure and expand ecotourism services in the Montetik park, and in the longer term, the project team hopes to secure payments to the El Aguaje from the city for the ecosystem services their lands provide.

Learn more about Pronatura Sur at pronatura-sur.org, and watch the [team's proposal video](#).





Catalyzing Watershed-Scale Change and Preserving Puebloan Lifeways in the Middle Rio Grande Corridor

Trees, Water & People

Middle Rio Grande Urban Corridor, New Mexico

In the eastern Jemez Mountains, a century-long history of fire exclusion, paired with prolonged drought, has resulted in a series of high-intensity fires throughout the region that have destroyed significant portions of critical watersheds. Cumulative impacts from fires, floods, and drought have led to substantial ecological decline, including in the Middle Rio Grande watershed, which flows through the Jemez Mountains and provides drinking water to nearly one-half of New Mexico residents.

As a result of this degradation, downstream residents have been flooded out of their homes and watched as fires reached city limits. Sediment loads have plugged the Rio Grande, shutting down Albuquerque municipal water supply for up to 40 days at a time. For the Pueblos, there is an enormous sense of loss because the landscape that serves as the core of their cultural identity and practice is gone.

To address this challenge, this project team has proposed to repair the natural function and structure of Capulin Canyon, in the heart of the Middle Rio Grande urban corridor, and to leverage a cross-sector network of partners to ensure future resilience to disasters related to climate change. This collaborative, Indigenous-led restoration project in Capulin Canyon will improve watershed health and ecological integrity through upland reforestation to improve water quality; support canyon-bottom revegetation with native shrubs and grasses, to provide wildlife



habitat and stabilize banks, which in turn improves channel/floodplain connectivity; and undertake invasive species removal from riparian areas.

At the same time, the project team will foster community climate resilience by protecting and enhancing access to socio-ecological resources and areas important to Pueblo communities for traditional practices; cultivating and reintroducing culturally significant plants for Pueblo communities; and recruiting Tribal and youth workforce participation in the Pueblo Natural Resource Departments and Rocky Mountain Youth Corps. Throughout, the team will facilitate regular and extensive stakeholder and community input and exchange, and build on existing collaborative structures and models established through restoration efforts in the neighboring Frijoles and Santa Clara Canyons. In the long term, the team's efforts in Capulin Canyon will set the stage for landscape connectivity and lateral benefits within the urban, hydrologic corridor, and improve meaningful collaboration among Tribes, local organizations, and federal agencies.



Learn more about Trees, Water & People at treeswaterpeople.org, and watch the [team's proposal video](#).



Witness Trees

Turner Station Conservation Teams Baltimore, Maryland

Baltimore is a post-industrial port city located in the upper Chesapeake Bay. Climate models project that coastal communities in the region will see higher than average flooding impacts due to the combined effects of land subsidence, general sea-level rise, and ocean “swelling” in this part of the Atlantic. Baltimore also suffers from legacy impacts of redlining in many forms, one of which is significantly fewer trees and green spaces in BIPOC communities.

This lack of investment in green infrastructure in these communities is linked to poorer air and water quality, higher asthma rates, cardiovascular disease, mental health issues, higher crime rates, and more. Baltimore also has a 20 percent unemployment rate (pre-pandemic). As an African-American waterfront community surrounded by heavy industry and suffering from the collapse and legacy pollution of its primary industrial employer, Turner Station is, in some ways, an environmental justice poster child. The community’s significant amount of open space and eagerness to be a leader in climate resilience and green equity means it can serve as a model of “greenlining”—using green infrastructure as a central pillar of community revitalization efforts.

Witness Trees is a collaborative effort between the Greater Baltimore Wilderness Coalition, Baltimore County, Baltimore Tree Trust, and the historically African-American Turner Station Conservation Teams. The proposed project builds on the larger sea-level rise protection effort by focusing on upland restoration: planting hundreds of trees in Fleming Park and throughout the community and identifying other nature-based restoration opportunities. The trees will increase residents’ access



to nature and enhance ecosystem services like lower air temperatures, decreased flooding, increased wildlife, and better air quality.

The trees will be planted and cared for by community youth who enlist in the inaugural cohort of Baltimore Climate Corps, a regional initiative that will hire, mentor, and train local youth for environmental careers. In planting a new generation of “Witness Trees”—sentinel species in culturally and ecologically significant landscapes—this new generation of conservationists will mark and celebrate the region’s Black, Brown, and Indigenous communities’ stories and embodied wisdom. The Witness Trees project will bring together and leverage existing partnerships and programs, such as Turner Station’s Fleming Park Resiliency and Restoration project, an innovative project that uses dredged sediment from the Baltimore Harbor to restore tidal wetlands and enhance local resiliency. Through this project, the Witness Trees team aims to generate positive impacts in the near term and catalyze investments in natural and nature-based strategies for the Baltimore-metro region in the long term.

Learn more about Turner Station Conservation Teams at turnerstation.org, and watch the [team’s proposal video](#).





Cleveland's Urban Tree Hub

Western Reserve Land Conservancy Cleveland, Ohio

Once known as the Forest City, Cleveland has lost half of its tree canopy coverage due to development, disease, and lack of maintenance, and an estimated 97 acres of tree canopy is lost each year. As tree canopy continues to decline, Cleveland is heating up due to urban heat island effects and climate change, which cause extreme weather, public health problems, and water quality issues. Even at its current level, Cleveland's tree canopy coverage creates vital public health benefits—but these benefits are not equally available to all residents because canopy levels vary from neighborhood to neighborhood. Neighborhoods on Cleveland's east side, which already face poverty and disinvestment, also have low tree canopy coverage, further exacerbating the environmental injustice faced by these communities.

To begin to address this inequity, Western Reserve Land Conservancy, Rid-All Green Partnership, and Burton Bell Carr Development have proposed a joint effort to create an Urban Tree Hub in the Kinsman neighborhood of Cleveland. The project will grow, plant, and give away trees to the residents of the east side of Cleveland. In the first 24 months, the project will plant 100 trees, distribute an additional 400 trees to residents, and train 25 residents to plant and care for trees through a tree steward training program.

By connecting to residents through trusted institutions, such as the Burton Bell Carr community development organization, the project team will develop authentic relationships with communities most in need of reforestation. As residents learn about trees and their benefits, they will become more willing to consider planting a tree in their own yards. The



tree steward training will also be offered to local volunteers who can then serve as leaders in their communities, engaging neighbors in planting and caring for trees. The Urban Tree Hub will further be the future location of an urban tree nursery, with a planned land purchase and infrastructure improvements to prepare to plant nursery stock.

Throughout, the project team will continue to explore opportunities to create workforce development training, with the goal of employing individuals who have had experience with the incarceration system in the planting and maintenance of trees. If successful, this project will provide a scalable model for bringing trees directly to the neighborhoods that need them the most and for empowering communities to tackle the challenges of climate change through workforce development opportunities.



Learn more about Western Reserve Land Conservancy at wrlandconservancy.org, and watch the [team's proposal video](#).



NYC Foodways Collective

Youth Ministries for Peace and Justice Bronx, New York

Across New York City, people of color and recent immigrants suffer disproportionately from harsh environmental stressors that follow a long history of inequitable development and deleterious health outcomes. Policies and practices based on a history of structural racism and discrimination have created neighborhoods throughout the city with disproportionate environmental hazards, high rates of poverty, and limited access to resources that promote health. These neighborhoods lack sufficient open space, which is critical for improving mental health, recreational opportunities, air quality, and overall quality of life. At the same time, climate change is exacerbating these problems: rising temperatures, rising sea levels, and more frequent storm events hit communities harder due to lack of green space, dwindling infrastructure investment, and poverty. Additionally, communities of color are often food deserts that have contributed to reduced lifespans when combined with economic inequality.

In response to these challenges, this project team has proposed a collective impact project that seeks to enhance community resilience by building a community-driven, bottom-up governing body to design and implement “Foodways” in each borough, building on a successful existing model in the Bronx. Youth Ministries for Peace and Justice defines Foodways as public sites where gardening, foraging, environmental education, climate resilience, and explorations of cultural and nutritional occur. Foodways offer a strategic entry point to address complex array of aforementioned challenges, and can transform derelict green spaces to lower temperatures, provide outdoor activities,



absorb stormwater, provide access to healthy foods, and organize the community around resilience.

The overarching goal of this project is to enhance community climate resilience and improve health by strategically managing green spaces. The team will organize five community-based organizations from each borough into a governing structure, provide technical assistance and support for each borough's Foodway, facilitate the development of community resilience plans, influence NYC parks policy to include Foodways, and build a strong network of community organizations advocating for the enhanced use of green spaces in NYC. Ultimately, the team hopes that the decentralized, community-driven nature of this project will increase neighborhood resiliency through local planning and implementation that reflects the unique needs, strengths, and limitations of each participating neighborhood.

Learn more about Youth Ministries for Peace and Justice at ympj.org, and watch the [team's proposal video](#).





OTHER CHALLENGE PROPOSALS



A Community Energy and Food System (CEFS) as a plan to improve resilience in vulnerable communities ●●

Accionética and Tecnológico de Monterrey, Design for Vulnerables Initiative Ciudad Juárez, Chihuahua



Near the U.S.-Mexico border lies Paseo del Norte, a vulnerable community that consists primarily of people displaced from their original homes by climate change and economic constraints. Desertification and the effects of climate change have severely affected the local environment by increasing the urban heat island effect in a neighborhood with very little vegetation. As a result, the community is facing a variety of challenges including poor housing, insufficient water and energy availability, and a lack of services and recreational areas, combined with income inequality and personal security constraints particularly for children and women, within the neighborhood. This project aims to co-create a Community Energy and Food System (CEFS) to overcome energy poverty and adapt to climate change. It will also improve the community's spatial design by demonstrating the benefits of incorporating green infrastructure and crop production sites. By using participatory design and methods that promote social cohesion across the community, this project will provide a model for a CEFS that incorporates green spatial design, distributed renewable energy, and localized, sustainable crop production. The ultimate goal of this endeavor

is to provide insight into the design, development, and implementation of a CEFS to promote adaptation of the system by other communities in the region.

Learn more about Accionética and Tecnológico de Monterrey, Design for Vulnerables Initiative at designforvulnerables.com, and watch the [team's proposal video](#).

Fare Farms Initiative ●●

Afro Van Connect Society Vancouver, British Columbia

Nearly 30% of Black Canadian households experience food insecurity and a lack of access to affordable food. Systemic inequalities have compounded the issue by reducing Black Canadians' potential to achieve food sovereignty. The Afro Van Connect Society envisions a supply chain that localizes production and minimizes cost by engaging the municipal government in food system planning. It seeks to create and support local initiatives; enact policies; and develop programs that can shape the local food system and respond to the specific needs of people of African descent. The Fare Farms Initiative is a network for Afro-Indigenous-centered farming and gardening, outdoor education, and food security. Over 18 to 24 months, the Fare Farms Initiative will establish a full-fledged farm, food pantry, ancestral seed library, community medicine cabinet, and event space. In addition, the team will use a storytelling campaign and educational videos to further engage the community in this effort. Long term, Afro Van Connect Society will create a hub for African Diasporic Food Justice initiatives across Metro Vancouver. The farm aims to be an intergenerational space for teaching and skill-building and a resource for vulnerable community members, providing opportunities for the community to gain life skills that promote sustainability and empowerment, building new spaces, and cultivating the land to grow produce to support secure food sources.



Learn more about Afro Van Connect Society at afrovanconnect.com, and watch the [team's proposal video](#).

Sacramento National Park City ●●●

Alchemist Community Development Corporation Sacramento, California

In Sacramento, as in many other places, areas with the highest concentration of low-income families are more likely to be exposed to pollution and environmental hazards and lack access to quality green space. As a result, they experience higher rates of mental and physical health issues. The challenge is to transform these neighborhoods into green, healthy, and stimulating places, through the addition of trees and gardens, as well as safe and enjoyable connections to transportation and recreation. Sacramento National Park City is a unifying vision to achieve these goals and to better connect people, places, and nature in Sacramento. This broad vision will take shape within two communities in the Meadowview/South Sacramento area. These communities have the thinnest



tree canopy and smallest park acreage per capita. They lack access to healthy food, are separated from regional greenways, and have few public art displays. The project will increase tree canopy, support land transformation through a Green Alley activation project, install local art that supports neighborhood history and identity, and develop neglected spaces into community gardens for healthy food production, neighborhood pride, and habitat. This multi-pronged approach to neighborhood transformation has the potential to be applied throughout Sacramento. The broader National Park City Family is working to establish 25 new National Park Cities around the world by 2025—a goal that can only be achieved through engaging and investing in greener, wilder, and healthier communities.

Learn more about Alchemist Community Development Corporation at alchemistcdc.org, and watch the [team's proposal video](#).

I am Islais: Visions for Environmental Justice Now! ●●

Architectural Ecologies Lab, California College of the Arts San Francisco, California

San Francisco's Islais Creek provides important habitat for wildlife and serves as an important source of drinking water. However, preserving these benefits requires conservation action, because the creek has been reduced by roughly 80% from its historical extent due to urban development. I am Islais will work to transform the ideas of young people into actionable steps to address conservation challenges. The project team collaborated with a local elementary school in a marginalized community to brainstorm solutions to the challenges facing the creek. They asked fourth graders for their thoughts on how to create a space that is safe, thriving, and equitable. Architectural students then translated a list of their recommendations into practical and ecological components that can be scaled and





implemented. Community workshops will serve as introductions to broader aspects of the project, such as establishing an urban fruit grove and floating wetlands. These initiatives aim to foster community stewardship of the creek while implementing ecological remediation interventions that are scalable across the area.

Learn more about Architectural Ecologies Lab at architecturalecologies.cca.edu, and watch the [team's proposal video](#).

Hacking the Sargassum Problem: A Nature-based Solution to Re-Ignite the Economy and Environment ●●

AREA Research Punta Santiago, Humacao, Puerto Rico

Sargassum, a type of seaweed, is an essential ecosystem in the open ocean: It provides nutrients, a safe migration route, and habitat for many marine species, including crabs, tuna, and many more. With oceans warming, a resulting large influx of sargassum and subsequent accumulations are causing significant ecological and socio-economic impacts to coastal communities, including changing the water's pH, creating dead areas where marine species cannot thrive, and causing damage to fishing equipment. Through a nature-based approach and community leadership and engagement, AREA Research plans to turn the problem into a circular economy opportunity. The project will provide education and resilient management tools to fishermen, students, and other community member. This will allow them to collect sargassum safely and legally, and then transform it into bio-based products such as shoe soles, brick modules for construction, and paper products. The team's proposed project will alleviate the marine ecological problem. It will also improve the Punta Santiago

fishermen community's daily activities by building their knowledge of how to deal with problematic sargassum. Punta Santiago lies in the Humacao municipality of Puerto Rico, a low-density coastal urban area with a poverty rate of 45.6%. Hurricanes Irma and María's landfall in 2017 had a devastating impact on the community, which destroyed the natural and built ecosystem and jeopardized community well-being. Fishermen have suffered significant equipment, infrastructure, and economic losses. These challenges have been compounded by the unprecedented accumulation of sargassum; operational hazards due to sargassum entanglement in fishing gear; dead water zones caused by altered pH levels, requiring fisherman to move further from their traditional coastal fishing water; and tourism disruption due to decomposing sargassum accumulating on local beaches. If the AREA team is successful, the project could be replicable across the Island of Puerto Rico and the Caribbean region, serving as a model for educating fishermen and the public on ecologically dealing with sargassum inundation while providing avenues for economic development led and controlled by the local community.

Learn more about AREA Research at AREAresearch.org, and watch the [team's proposal video](#).

Regenerative Dinétah initiative - Food-Water-Energy-Shelter-Land Sovereignty through Collectivism ●●

Collective Medicine
Ganado, Arizona



The Navajo Nation, the largest sovereign Native American Nation, lies on arid land in an extreme desert climate. The largely rural landscape creates socioeconomic and geographic barriers to meeting basic needs such as food, water, energy, and shelter. If the Navajo Nation is to overcome these barriers, it must design systems for long-term resiliency, with a combination of economic viability, technological feasibility, individual and community desirability, and environmental sustainability. An initiative proposed by this team aims to do just that. Working directly with Tribal elders, community members, and grassroots partners, the team will co-create nature-based solutions that incorporate agrivoltaics, water harnessing and conservation, food sovereignty, and equity for the Navajo Nation in Arizona. The initiative will focus on key leverage points of collectivism, enabling prosperity by increasing collective agency in the entire

community. The proposed project will establish a community-centric “social ecopreneurs” network, design and implement sustainable water- and sun-harvesting systems, harness Indigenous wisdom of communal living and collectivism, and bolster sustainable farming practices through use of systems like agrivoltaics. The outcome will be resilient individuals, communities, and landscapes—an exemplar for Indian Country.

Learn more about Collective Medicine at collectivemedicine.net, and watch the [team's proposal video](#).

The Mindful Pocket Park Project ●●

Community Reinvestment Alliance North Miami
Miami, Florida



The City of Miami has spent the past several years building its resilience efforts as part of the 100 Resilient Cities program spearheaded by the Rockefeller Foundation. However, many of the actions taken include building raised roads and installing flood pumps, rather than holistic, nature-based solutions to build resilience. Additionally, areas of economic disparity and BIPOC communities have seen little action taken to bolster climate resilience in their neighborhoods. Research has shown that a person’s level of cortisol—the stress hormone—drops after as few as 20 minutes of immersion in nature, and that elevated levels of cortisol in BIPOC youth contribute to long term health impacts. Separately, more than 5,000 studies demonstrate the mental and physical benefits of mindfulness techniques. These include emotional regulation and increased personal resilience. To address the lack of BIPOC communities’ access to nature and create greater opportunities for “mindful resilience,” this team has

proposed the Mindful Pocket Park Project, a nature-immersive experience in the concrete urban core of Miami. The project is an urban rewilding initiative to create more than gardens, but parks with a purpose: stress reduction and mindfulness benefits for underserved communities. These pocket parks will offer BIPOC youth resources to support learning resilience through mindfulness and emotional intelligence. Ultimately, by creating space and activities that counteract the stresses experienced by BIPOC communities, especially those driven by economic disparity, climate change, and racial inequity, this project will establish a proof of concept that could be

replicated to help communities build green spaces that help bolster climate resilience while also building mentally resilient citizens more capable of addressing overwhelming challenges like climate change.

Learn more about the Community Reinvestment Alliance North Miami at crasf.org, and watch the [team's proposal video](#).

Meet Our Guani River, Project of the Citizens of Pátzcuaro for its Recovery ●●

Consejo Ciudadano de la Región Lacustre de Pátzcuaro (Citizen Council of the Lacustrine Region of Pátzcuaro)
Pátzcuaro, Michoacán



At one time, Pátzcuaro's Guani River carried clean and crystalline water, but years of urban growth have transformed it into a receptacle of organic and inorganic waste—and one of the main sources of pollution of Lake Pátzcuaro. This project aims to bolster awareness and environmental education among the citizens of Pátzcuaro by engaging the community in the development and implementation of an environmental management plan to address pollution upstream of Lake Pátzcuaro. This effort will strengthen interinstitutional and community connections by building action networks based in environment and culture. This will improve the health of the river and basin as a whole by empowering communities to take pride in and responsibility for the environmental issues impacting their community. The team will implement

green solutions that are low-maintenance and sustainable. These will include establishing an artificial nature-based filtration system and green zones, to enhance the city's image and bolster the river's ability to remain resilient to the impacts of pollution and climate change. This, in turn, will improve the quality of life of the city's inhabitants. The team hopes the project will serve as an example of how collaborative participation and community engagement can improve the outcomes of similar water cleanup and conservation efforts, and as a case study of how to deploy river and lake basin integrated restoration and pollution management plans.

Learn more about Consejo Ciudadano de la Región Lacustre de Pátzcuaro at proyectorioguaninfo, and watch the [team's proposal video](#).

Engaging Denver Communities in Taking Action For The Birds ●●

National Audubon Society Denver, Colorado

Studies have shown that natural areas and bird diversity are important for human well-being. They provide psychological benefits and emotional well-being. Unfortunately, bird populations have declined 29% over the past 50 years, largely caused by urban and residential development. This team's proposed project will create a community-directed volunteer program in Denver metro neighborhoods identified as underserved in terms of access to nature and green spaces. Identified neighborhoods will be engaged in education programs, provided resources on native plants that can help support bird populations, and given access to mentorship opportunities to help them add bird habitats to their urban neighborhoods. Volunteers will be trained to promote bird-friendly native gardens in their community. By sharing their love of birds and knowledge of native plants, volunteers will inspire solutions to habitat loss from urban and residential development. Doing so will give them the confidence and knowledge to lead sustainable, climate-resilient change within their neighborhoods. Because nature should be accessible to all, the teams has developed this volunteer program to be accessible to all by partnering with advocates for accessible birding. By improving parks, common areas, backyards, and private property, bird habitats will also improve water resiliency, restore native biodiversity, and bolster the community's climate resilience. These benefits will culminate in improving native habitat in urban areas in a way that supports clean water, reduces pollutants, and provides accessible green spaces for human health and enjoyment.



Learn more about Denver Audubon at denveraudubon.org, and watch the [team's proposal video](#).

Community-led nature-based solutions to restore environmental/climate justice in the Duwamish Valley ●●

Duwamish River Cleanup Coalition Seattle, Washington

The Duwamish Valley residents of South Park and Georgetown are exposed to multiple environmental justice concerns and include a high percentage of vulnerable populations. The population is more than 70% BIPOC and close to three-quarters of the population



are below 200% of the federal poverty line. Average life expectancy is eight years shorter in the Valley than Seattle and King County, and 13 years shorter than more affluent, predominantly white neighborhoods in Seattle. Climate change is expected to affect the Duwamish Valley much earlier and in much more significant ways. For example, 80-90% of acreage in the city that is expected to experience significant flooding by 2050 is located in the Duwamish Valley. Due to lack of greenspace, the heat index is frequently higher in the Valley and smoke events from recent wildfires affects the air quality to a much higher degree than in other parts of the region. Challenges include obstacles to outreach, such language differences; a sense of disinvestment due to systemic racism; and a general lack of resources. The sources of air pollution are too divergent to address singly. In response, the Duwamish River Cleanup Coalition (DRCC) and

their partners across the community launched the Clean Air Program in 2019. The team has finalized an action plan to improve air quality using asthma rates as an indicator. Their proposed project aims to improve indoor air quality using interventions including installation of green walls and improving outdoor spaces through a tree planting program and enhancing the design and quality of the community's greenspaces. DRCC hopes this project can demonstrate how to prioritize environmental justice in efforts to address a wide array of environmental challenges through a collaborative problem-solving approach.

Learn more about Duwamish River Cleanup Coalition at duwamishcleanup.org, and watch the [team's proposal video](#).

Bridging the rural-urban divide through community wealth building, food sovereignty, and economic justice ●●

East Denver Food Hub Bennett, Colorado

This project team is led by East Denver Food Hub, a social enterprise group launched to support and advance a resilient, equitable, and compassionate local food ecosystem. This project team is committed to building a sustainable model for local food aggregation



and distribution and has already seen success. Thirty-five acres of land have been dedicated to the project, and two local food producers currently grow food there. The Food Hub also offers its farmers technical guidance and resources, such as assistance with food safety certifications, support around distribution and logistics, and storage. And, through partnerships and connections with food access organizations, pantries, and retail and wholesale partners in the region, the Food Hub provides its farmers with access to new markets. With their proposed project, the team aims to replicate this model with 10-15 new BIPOC farmers and food producers in Denver who share the vision of a local, compassionate, and equitable food ecosystem. Looking ahead, this project aims to establish a circular and sustainable economic model for the Denver area's local food ecosystem.

Learn more about East Denver Food Hub at eastdenverfoodhub.com, and watch the [team's proposal video](#).

Building Climate and Economic Resilience through Kelp Farming in Southeast Alaska

Ecotrust Kake, Alaska

Regenerative ocean farming sequesters carbon, rebuilds marine ecosystems, enriches soil, and reduces methane production in livestock. Research shows a 60% to 90% reduction in methane emissions from cattle when just 2% of their feed is amended with seaweed. Ocean crops improve water quality by absorbing excess nutrient pollution, provide essential habitat that supports diverse wildlife and ecosystems, and helps mitigate ocean acidification by absorbing carbon. According to the World Bank, farming kelp and seaweed in less than 5% of U.S. waters could create thousands of jobs in direct on-farm employment alone. Applying these numbers to the Southeast Alaska region, the potential jobs created by expanding ocean farming will have a significant, positive impact on the regional economy, which is currently rooted in natural resource extraction but has the potential to transition toward a green economy.



This project aims to position Alaska Natives across Southeast Alaska to launch kelp, oyster, or multi-species ocean farms. The team aims to enhance traditional and subsistence food security while implementing a nature-based solution that supports climate resilience, enabling diversified local economies, and growing a workforce that supports Tribal sovereignty in the Tlingit community of Kake. With new support, this project can continue building capacity for kelp and shellfish farming by connecting with local individuals who want to build regenerative farming businesses that reaffirm their stewardship of lands and waters while addressing the effects of climate change. The project will also extend an existing farmer stipend program, and support establishing a farmer's cooperative which will give partners a more active role in the management of their traditional coastlines. This project will provide a model for other coastal Indigenous communities to increase their food sovereignty, augment their economies, and increase their climate resilience while positioning Kake as a hub for the burgeoning mariculture industry in Southeast Alaska.

Learn more about Ecotrust at ecotrust.org, and watch the [team's proposal video](#).

Veterans' Memorial Park Expansion Project - Vegetative Borders ●●

Elgin, Texas Main Street Board Elgin, Texas



Founded in 1872 on agriculture and the brick industry, Elgin is located 19 miles east of Austin, Texas on US Highway 290. Elgin is a diverse community experiencing dramatic growth and struggling to meet infrastructure demands that support the health, wellness, and connectivity of the community. The City of Elgin is 59.6% White, 22.8% African American and 44% Hispanic or Latino. The Veterans' Memorial Park Expansion Project will unite an area that has experienced economic and racial barriers. From 2013 to 2015, the City of Elgin was one of five cities in Central Texas to participate in the Sustainable Places Project, to help communities create the conditions for livable places consistent with local goals and values. Building upon that work, the Veterans' Park Expansion Project, in the heart of Elgin's Historic District, will convert four undeveloped, city-owned vacant lots into modern, accessible, vibrant parkland. Lots currently covered in old asphalt are used for

materials storage. They will be transformed into playgrounds and gathering spaces with native plantings, natural shade elements, and permeable surfaces. This plan focuses on long-term livability and inclusivity by increasing the opportunities to live, work, and play downtown. Building on the goals established through this project, this team aims to create a vegetative border between parkland and an active railroad line to improve safety, appearance, environmental factors like increased shade and wildlife habitat, and community health. The downtown district has 90 apartments, a 90% occupancy rate, and five active renovation or new construction projects this year. Creating this expanded park space with a collaborative and integrated team will rejuvenate this area and make it possible for everyone to feel welcome here, to see that they are part of the community, and to enjoy a flourishing park welcoming to all Elgin residents.

Learn more about Elgin, Texas Main Street Board at elgintx.com, and watch the [team's proposal video](#).



Resilient Bridgeport: Individual Actions, Collective Impact ●●

Groundwork Bridgeport Bridgeport, Connecticut

Bridgeport, Connecticut, the state's most populous city, has suffered from decades of decline and disinvestment as the local economy has shifted from industrial production to one driven by a knowledge and service economy. By a variety of measures, the city, though located in one of the nation's wealthiest counties, is severely impoverished. Its long-time economic woes have exacerbated the impacts acute shocks like extreme weather events, and chronic stresses such as high unemployment already place on the city. The physical and social health of the city and its residents are just two areas that have suffered from Bridgeport's overall decline. The landscape is plagued by private and city-owned vacant land which leaves a blight on the community. A lack of tree canopy (22% vs 49% at the state level) contributes to an urban heat island effect. Asthma—Bridgeport residents are nearly 3 times more likely to be hospitalized than state residents overall—and other health and climate resilience issues are endemic. Further, political corruption has tarnished the city's already negative image and thus made it unattractive for meaningful investment. As a coastal city adjacent to Long Island Sound, Bridgeport faces significant challenges related to climate change and sea-level rise, with some of the city's poorest residents living on the waterfront and other areas prone

to flooding. Using data-based storytelling and the principles of behavior change, Resilient Bridgeport aims to empower residents with the knowledge and resources they need to better understand the context and root causes for the resilience, health, and equity issues they face. The project team also aims to help residents overcome barriers to action they can take to improve in these areas by creating a system that rewards behaviors that produce a positive output, such as planting and maintaining a tree. The solution is to provide a framework of discrete and achievable actions, co-created with the community, that can be pursued by individuals or households to fight climate change and increase resilience. The team aims to develop a customizable software that empowers residents to take small actions towards building climate resilience and has the potential to be expanded and tailored to other communities.

Learn more about Groundwork Bridgeport at groundworkbridgeport.org, and watch the [team's proposal video](#).

Harlem Grown's 127th St. Compost Annex ●●

Harlem Grown
New York City, New York



Central Harlem is the third most food insecure neighborhood in New York City, with 27% of its residents facing food insecurity. The poverty and unemployment rates are three times higher than the Upper East Side. Obesity rates are eight times higher, diabetes four times higher, and hypertension twice as high as in the Financial District and Greenwich Village/Soho. As pioneers in urban farming, Harlem Grown has established a community-driven and adaptable model to address the needs of the Harlem community. A composting program that began with a few hundred pounds in 2015 has since evolved into a community-wide effort. Of the team's 11 agricultural sites in Harlem, there is compost drop off at five, with a constant demand from the community. As a result, Harlem Grown has become the go-to organization, recognized as a model for sustainability, food justice, and community engagement. To build upon this success, a composting annex serves as the next step in an innovative model to serve the Harlem BIPOC community that traditionally has been excluded from such programs. In the long-term, this effort strives to take waste products destined for landfills and make a product that will allow the community to grow more and healthier food. The team will also educate residents on best practices surrounding composting and food scrap

collection to continue to foster a more sustainable community, while giving away compost to Harlem youth and families and designing nutrition and sustainability lessons for the community around resilient systems. With this nature-based solution, Harlem Grown will ensure that water and nutrients are conserved and almost no greenhouse gasses are produced from food waste that would have otherwise been sent to the landfill.

Learn more about Harlem Grown at harlemgrown.org, and watch the [team's proposal video](#).

Regenerating Our Roots - a Bi-State Approach to Equitable Climate Resiliency ●●●

Heartland Conservation Alliance Kansas City, Missouri and Kansas

Climate vulnerability is the most daunting challenge facing cities. In Kansas City, the region's planning authority recently published a Climate Risk & Vulnerability Assessment. It identifies which areas of the city will experience the highest socioeconomic stress as a result of emerging climate impacts. Jersey Creek in Kansas City, Kansas and Blue River in Kansas City, Missouri are two historically marginalized neighborhood in adjacent cities identified as geographic regions in need of intervention. These communities are more likely to be negatively affected by the environmental, health, and social impacts of climate change and they have less capacity and available resources to recover. Similarly, these neighborhoods are mostly composed of BIPOC residents who survive and thrive despite a racist and discriminatory legacy that has created poor health, poverty, high unemployment, and left behind a large number of vacant lots and a dying urban canopy. It is critical to be proactive in executing activities that raise community awareness around climate justice and to create opportunities for residents to actively intervene in the disparities they see in their built and natural environment. Some of the resources significantly lacking in the focus area are healthy green spaces, healthy rivers, and a healthy urban forest. This shortcoming is exacerbated in Kansas City by vacant and blighted land—the result of a decreasing population and



a lack of institutional foresight and planning, which has led to the demolition of savable housing stock and produced an abundance of vacant lots. Regenerating Our Roots aims to break down barriers to collaboration across the Kansas/Missouri state line, continue engagement with local leadership in its existing grassroots efforts toward community engagement, and sustain efforts to increase climate resilience by expanding access to green space in urban areas. To achieve these goals, the project team will raise climate change awareness through grassroots community events and organizing, advocate for policy to support BIPOC communities most affected by the current climate crisis, start a tree and native species nursery to support local jobs in this area, and lead green revitalization projects with intergenerational learning opportunities that increase community cohesion. One such project will be community-led improvements to the health of two impaired urban watersheds. Efforts will include planting trees and restoring urban forests, which will build resiliency to flooding, increased temperatures, and the sustained drought expected in coming years. Furthermore, by engaging youth from the city's most vulnerable neighborhoods in these efforts, the team will increase environmental awareness to catalyze future, more diverse leadership for conservation.

Learn more about Heartland Conservation Alliance at heartlandconservationalliance.org, and watch the [team's proposal video](#).

Summit for Empowerment Action & Leadership ●

Heirs To Our Oceans Paauilo, Hawaii



Hawaii's natural environment has deteriorated due to poor leadership, exploitation of natural resources, and marginalization of local and Indigenous people. The Heirs to Our Oceans team believes that long-term investment in young people is necessary to make effective and long-lasting change to heal the planet and humanity. Through the proposed H2OO Summit for Empowerment Action & Leadership (SEAL), youth will come together from around the world for a two-week intensive education and training program involving collaborative learning and processing of solutions, policy-change advocacy, problem solving, public

speaking, and empathetic leadership skills. Eighty percent of SEAL participants are underserved, underrepresented, marginalized and/or Indigenous youth. They will receive education in human impacts on oceans and waterways, including how human activity drives climate change and ecological degradation, facilitated by scientists, researchers, advocates, and peer learning. Upon completion of the program, attendees will be prepared to return to their communities to inspire and mobilize other youth champion advocacy in climate action at the local, national, and global levels.

Learn more about Heirs To Our Oceans at h2oo.org, and watch the [team's proposal video](#).

Community Impact ●●

Lincoln Hills Cares Denver, Colorado



This project strives to increase equity in access to outdoor resources and expand opportunities for youth, families, and communities in Denver who may experience barriers to green space. The team's grassroots model to build climate resiliency includes two theories of practice: Education and community-based projects. The project will focus on climate change education, urban agriculture, and pollinators. A pollinator garden will be installed at Sonny Lawson Park, where outdoor educators will deliver programming on recycling and food production. The team will also expand the food-focused trainings to other community farms in the city, such as the surrounding local schools and neighboring marginalized neighborhoods. Sonny Lawson Park lies in the Five Points neighborhood of Denver, a

predominantly BIPOC community. In Denver, less than 1 percent of food consumed comes from local sources, and an even smaller portion of that is consumed in low-income neighborhoods. Community Impact aims to change this by engaging local students in food production. By partnering with existing farms, as well as local markets and schools, the project will ultimately bring healthy food to students and deepen community engagement with their families in southwest and northeast Denver.

Learn more about Lincoln Hills Cares at lincolnhillscares.org, and watch the [team's proposal video](#).



The Urban Forest Project: A Living Lab for Nature-Based Learning ●●●

Local First Arizona Tucson, Arizona

Low-income communities have been disproportionately affected by negative health impacts such as reduced food access, poor air quality, and dangerously high temperatures. All three issues can be addressed by adopting policies and leveraging tools to protect lands that encourage urban farming and food forests. To create these opportunities for change, Local First Arizona and its partners are implementing a new nature-based living laboratory in an under-resourced neighborhood in Tucson. This Urban Forest Project will be a dynamic green space reflecting southwestern climate-appropriate botany, hydrologic features, and ecosystem functions. The place-based project is focused on the Amphi neighborhood of Tucson, one of the most racially diverse and poorest neighborhoods in the city. This pilot will serve as a model to apply to other neighborhoods in under-resourced communities. While mitigating urban heat island effect and air pollution, the living laboratory will focus on a food forest development that can offer and provide hands-on training on multi-strata urban agriculture and food processing to residents in the neighborhood. The project will improve quality of life by creating a cooler micro-climate, improved water and air quality (including storm water management and carbon storage), and biodiversity; produce food that is healthy, organic, and accessible; and create ongoing sustainability educational opportunities for community members. The food forest design for this project consists of a one-acre site with in-built irrigation ditches and drip irrigation, access paths, and other sustainable features with a forest consisting of primarily native and desert-adapted plants with low water use. The project team envisions a site that provides a healthy, prosperous community for BIPOC and women entrepreneurs with a nature-based learning lab that will help revise the guidebooks on how to live ecologically and equitably

as communities with rapid changing climates in the Southwest. This project's findings can benefit under-resourced communities throughout Arizona and desert regions by serving as a model to others through the team's plans to examine and address major issues confronting local agriculture and food security including: agricultural land rapidly transitioning to urban land uses; municipalities that have no inventory of potential parcels most suitable for urban agriculture; and public policies and regulations that are grossly underutilized or are not written to accommodate urban agricultural uses now or for the next generation of farmers.

Learn more about Local First Arizona at localfirstaz.com, and watch the [team's proposal video](#).



Climate Champions: Engaging residents to develop place-based, nature-based solutions to displacement ●●

Mile High Connects Denver, Colorado

Affordable housing is critical infrastructure that, when integrated with climate-resilient practices, ensures that all residents—and especially residents of color—are able to thrive in place. However, conversations around climate often receive lower priority from community members than other critical issues, such as tenant protections. To better integrate climate resilience with community, this team is working to connect community initiatives and nature-based solutions. A Rapid Climate Vulnerability Assessment conducted in 2018 identified affordable housing strategies and highlighted connections to community health and climate stresses. Building on this assessment, the project team intends to develop methods to improve neighborhood responses to climate adaptation and support neighborhood-led initiatives for greening. The team will activate plans for intentional resource sharing, regular training for partners and allies, and cultivating the necessary leadership among

partners and the local environmental justice movement. Specifically, the team will promote alignment among housing, community, and nature-based efforts engaging community leaders and residents in developing community-led coalitions to address relevant challenges; build greater awareness of and support for culturally relevant, healthy, climate resilient housing in the Denver Metro area; and advance culturally relevant practices such as strengthening peer networks to engage the community in climate resilient conversations. These plans focus on identifying and advocating for community solutions that are nature-based and will empower

community members to act as climate champions capable of breaking down barriers while addressing inequitable climate and neighborhood planning policies.

Learn more about Mile High Connects at milehighconnects.org, and watch the [team's proposal video](#).

CulebraComposta ●●

Mujeres de Islas
Culebra, Puerto Rico



This team's vision is to address the challenge of food insecurity and food sovereignty by encouraging principles of sustainable development for the people of the island-municipality of Culebra, Puerto Rico. Culebra has a population of approximately 1,700 year-round residents, 90% of whom identify as Hispanic-Latin, but during high-tourism season the transient, tourist population can reach four times the local count. As a means to work toward their vision, the team's project aims to address challenges of organic waste disposed of at the island dump site, currently in danger of becoming non-EPA compliant due to a history of failing to meet local waste reduction needs. The community's dump lies on the edge of a natural marine reserve, Reserva Natural Canal Luis Peña, endangering a vulnerable marine population and coastal reef if the waste

problem continues. Increasing pressure on the dump site stems from the community's current human-produced waste cycle, which includes significant volume from an untaxed transient tourist population. The project team has developed and measured the success of a pilot compost project and now seeks to scale the pilot project up to include a campaign for a community-based and community-driven decentralized system of household-scale composting practice. By scaling composting up to the household level across the island, the project will diminish the amount of organic matter that reaches the landfill and leachates that runoff to the sea, transforming a linear waste cycle back into a cyclical one. Not only will this solution nourish soils with nutrient-rich organic matter, it will ultimately help feed the community and support its collective vision of food security.

Learn more about Mujeres de Islas at mujeresdeislas.com, and watch the [team's proposal video](#).

Develop Alternate Funding Models for Natural Areas Restoration & Management ●●

Natural Areas Conservancy New York City, New York

Natural areas provide critical climate and equity benefits, which include reducing the urban heat island effect and increasing access to nature. But a lack of consistent funding for their care can turn benefits to burdens and lead to inaccessible and unsafe natural spaces. Natural Areas Conservancy proposes to document the ways city government, nonprofits, and community groups pay for and contribute resources to natural area care. The project will explore and document opportunities not usually accounted for in typical fundraising cycles: carbon credits, environmental or climate bonds, and urban wood reuse. Efforts will also include interviews with “friends of” different parks, with special focus on parks without conservancies and groups that do care and maintenance work but are not 501(c)3 organizations. Next, the team will layer in valuations of ecosystem services via natural areas—using tools such as carbon density mapping—accounting for ecosystem services that natural areas are already providing and identifying new values that could be capitalized upon by conservancies, NYC Parks, and others. The project will also test the feasibility of on-the-ground action by piloting a project with a community group, focused on an underfunded natural area site that serves a low-income or BIPOC community, to help the group (still to be identified) build capacity and implement new funding streams. The outcomes of this project could be directly beneficial to local community groups and small nonprofits in New York City, as well as offer a methodology for searching and documenting that can be easily scaled to other cities.



Learn more about Natural Areas Conservancy at naturalareasnyc.org, and watch the [team's proposal video](#).

Progress Village Fountain Project ●●

Progress Village Civic Council Tampa, Florida

The Progress Village Fountain Project will renovate Simmons-Bowers Park in Tampa's Progress Village Community, a neighborhood with 800 single family homes, a middle school, and two parks. Many of the community's residents are individuals recently displaced



from government housing, undocumented workers, and non-English speaking residents. Currently, there is a pond, a pavilion, youth playground, and community garden. But the space is underused by the community because the high turnover in residents limits community investment in the neighborhood. Also, a persistent problem with litter keeps the pond from receiving stormwater runoff from around the community, leading to problematic flooding in the area—a challenge that will only intensify with climate change in the region. The Progress Village Fountain Project will excavate the pond, add a fountain, and rejuvenate the park, adding another pavilion and planting native plants. These additions to the neighborhood will increase stormwater retention, improve the quality of local green space, and improve the overall quality of life in the community by creating a space that promotes stewardship and discourages actions like littering. The team will also develop and distribute literature to the community and organize new green infrastructure programs like revitalizing two

other retention ponds to help residents better understand how their behavior impacts flooding and how nature-based solutions can increase neighborhood resilience.

Learn more about Progress Village Civic Council at progressvillageciviccouncil.org, and watch the [team's proposal video](#).

Full Circle Farms ●●●

Reunity Resources Santa Fe, New Mexico

Full Circle Community Farm is a place to cultivate not only vegetables, but relationships, artistry, and healing to regenerate desertified soils while nurturing the human connections that allow the community to thrive. The community, Agua Fria Village, is the most economically depressed region in Santa Fe County and is facing challenges tied to extreme drought and inequitable access to green spaces. Overcoming deep social challenges like colonization, inequitable development, climate injustice, and post-pandemic



isolation are central to Full Circle Farms' efforts. In response, this project team proposes an intersectional, multigenerational land stewardship project on Santa Fe County property. Full Circle Farms will rebuild healthy soil by working with indigenous/permaculture land design to minimize runoff from flash floods and maximize absorption, integrating local compost into the desertified, hardpan soil, and using a minimal solar-powered micro-drip irrigation system. These interventions will also aid in sequestering carbon, 'growing' water' by stretching the available resources further, and producing food to feed the community. By making that food accessible, the project is also working toward food justice for the local Indigenous community. Additionally, the community's efforts to continue expanding and improving the farms will support young farmers and build a network of urban food production across the county. This program will offer young people the opportunity to learn farming skills and the resources they need to succeed on their own later, creating a powerful ripple effect of community-based climate change and food systems resiliency.

Learn more about Reunity Resources reunityresources.com, and watch the [team's proposal video](#).

Nature-based solutions for equitable mental health care & eco-civic engagement ●●

Rising Routes Denver, Colorado

Across the U.S., there is growing recognition for the need to prioritize mental health. For many Coloradans, mental wellness involves seeking the outdoors to socialize, exercise, and more. In 2020 and beyond, the COVID-19 pandemic has had a significant impact on these practices. As communities have been more restricted in movement, engaging with the outdoors has become less attainable, especially for BIPOC majority communities in Denver's historically redlined neighborhoods, where poor climate and socioeconomic conditions exacerbate a variety of existing disparities. At the same time, there is a growing movement in Denver to increase community involvement in public meetings, neighborhood initiatives, and on boards of nonprofits and government agencies—and a desperate need for more diverse perspectives and participation. However, many barriers exist that deter involvement from underserved communities. These include limited or no access to mental health care and limited or no access to nature. This project builds on reputable research that illustrates the connection between mental health and access to green space. This project team will work to illuminate the importance of accessible, nature-based mental wellness tools and utilize them to engage Denver citizens

in addressing local social and environmental issues. For this project, the team will conduct field research to identify place-based barriers to nature and mental health care in Denver; strengthen community connections for use in development of a leadership program; create a multimedia toolkit of findings and collated peer-reviewed research to distribute to programmatic partners working with communities on the ground; and collaborate with city government stakeholders to identify potential mitigation strategies for nature-based mental wellness barriers, and inform a path forward. The final deliverable will be the framework for an actionable leadership pipeline program to promote civic engagement in social and environmental issues. This has the potential to better the lives of many historically disenfranchised individuals and communities through transformation and systemic change. Greater connection to

nature and the outdoors, combined with greater access to quality information about mental health care empowers individuals to join broader climate mitigation and community centered causes. Lastly, the team will leverage a network of Colorado-based conservation organizations that stand to benefit from work that fosters diversity in the climate resilience and conservation movement, such as Western Resource Advocates and Colorado Parks and Wildlife. These partners will help ensure that the nature-based solutions emerging from this work will continue to provide meaningful opportunities to engage over time.



Learn more about Rising Routes at risingroutes.org, and watch the [team's proposal video](#).

Climate Adaptation and Habitat Restoration Project ●●●●

Rocky Mountain Youth Corps Taos Pueblo, New Mexico

Rocky Mountain Youth Corps is working in close partnership with Taos Pueblo to mitigate and adapt to the multiple impacts of climate change that threaten the Pueblo's natural and cultural resources. The team's program will take place entirely at Taos Pueblo, along



the Rio Lucero and the Rio Pueblo Rivers. These rivers are threatened by drought, invasive fish species, and invasive vegetation, which erode the natural habitat and prevent native species from thriving. In response to these threats, this team will recruit and hire eight Corps members from Taos Pueblo to remove the invasive Brown Trout, monitor water quality and quantity, and restore the riparian habitat along these sacred rivers. These activities will help restore the Rio Grande Cutthroat Trout, the Sucker, and the Chub—all species of great cultural importance to the Pueblo. The water monitoring and habitat restoration will provide crucial data to allow the Pueblo to better understand how climate change is affecting the watershed. All Corps members will also participate in comprehensive life skills and workforce development training, earning professional certifications and academic scholarships that will support future careers in environmental conservation. The lessons learned from this innovative solution to climate change will contribute to the growing knowledge base surrounding land use policy in the region, the value of protecting native wildlife and habitat, and how such decisions are linked to climate resilience.

Learn more about Rocky Mountain Youth Corps at youthcorps.org, and watch the [team's proposal video](#).

Biodiversity Without Borders: International Pollinator Club ●

San Antonio River Foundation
San Antonio, Texas

In October 2020, Canada, the United States, and Mexico established the North American Friendship Garden in San Antonio, Texas, created as a symbol of trilateral support for the monarch butterfly and the threatened biodiversity along the monarch migration route. Situated along the San Antonio River, the garden lies within important migratory flyways, and its large array of pollinator plants serve



as a rest stop. Families and students who visit the garden can learn about pollinators, insects, and the urgency for wildlife conservation. Using this trilateral cooperation as a catalyst, the San Antonio River Foundation proposes the creation of an International Pollinator Club, where students from San Antonio will meet bi-monthly and connect via video conference with students in sister cities Guadalajara, Mexico, and Montréal, Canada. Each month, the school will feature a speaker and activities such as monarch identification training and tagging, putting stewardship into action. Collaboratively, the classes will build a citizen science project documenting larva and butterfly counts across the migration pathway, which passes through many urban areas. An Environmental Justice Committee composed of members from Latino Outdoors, Outdoor Afro, and Black Outside will assist the recruitment of

educators, teen ambassadors, and participating students. The International Pollinator Club will support urban biodiversity and educational equity across all three countries, connected by the monarch migration pathway.

Learn more about San Antonio River Foundation at sariverfound.org, and watch the [team's proposal video](#).

C.O.L.O.R.S. - Creating Outdoor Leadership through Outdoor Recreation & Sports ●●

Sierra Club Foundation Detroit, Michigan

The C.O.L.O.R.S team recognizes that much of the climate crisis has fundamentally been created by humans' disconnect from the earth, and that addressing the climate crisis can only be achieved by healing this divide. Communities of color have always borne the worst impacts of environmental degradation and will be hurt the most by climate change, but these same communities have often been excluded from environmental advocacy, and many times do not see a place for themselves in the outdoors. The project aims to bridge this gap, fostering connections between families of color in Detroit and the natural world and in turn, empowering them to advocate for climate solutions that are grounded in community needs. Climate resilience is not just building new infrastructure and using new technology; it also requires reconnecting humans and to their environment. To begin to heal this divide, this project team aims to create outdoor experiences for Detroit families of color that will allow them to explore the outdoors, start to build personal connections to the land, and ultimately, take action on climate change. By leading safe, culturally relevant, and meaningful outdoor

experiences for small groups of youth and their families, C.O.L.O.R.S. will teach participants about the ways Black and Brown people have connected with and acted as stewards of the land historically, and the ways that they can continue to protect and advocate for the environment. These outings will be both educational and opportunities for participants to connect with the outdoors and experience the deep sense of healing that can happen in nature. By having well-planned trips with all the gear, food, transportation, and permits taken care of, the team will remove many of the barriers many people face in getting outside. C.O.L.O.R.S. hopes to serve as a model for how to provide meaningful, culturally relevant outdoor experiences to Detroit families that could eventually be expanded on a bigger scale. As part of this project, the team will also advocate for our local decision-makers to recognize and reduce barriers to outdoor recreation in the area, while also working to bring more diverse voices to decision-making venues around land access and programming in the Detroit area.



Learn more about Sierra Club Foundation at sierraclubfoundation.org, and watch the [team's proposal video](#).



Urban Oases, a natural-based solution to be a resilient and sustainable city that can be enjoyed ●●

Sociedad de Historia Natural Niparaja (Niparaja Natural History Society)
La Paz, Baja California Sur

Baja California Sur is Mexico's driest state and one of the fastest growing, both economically and in population—factors that have combined to increasingly escalate the demand for limited resources like water. La Paz, the capital city, lies in a highly vulnerable watershed: Population growth and inadequate urban planning have led to a lack of green spaces, increasing localized temperature, and limiting

water infiltration. To address this mounting challenge, Sociedad De Historia Natural Niparaja has proposed Urban Oases, a 24-month project that will develop a network of inclusive and multifunctional public spaces in two marginalized neighborhoods of La Paz, largely inhabited by people of color and Indigenous people. These oases will help mitigate the impacts of climate change, extreme weather conditions, and urban development by improving air quality, decreasing local temperature, providing shadow, capturing rainwater, reducing flooding, and creating habitats for wildlife. They will also create social benefits by creating or replacing abandoned or neglected spaces with spaces for recreation, culture, and neighborhood cohesion, specifically in the communities most vulnerable to climate change and environmental harm. In creating the first two urban oases, this project will use a community-centered model to design, implement, and maintain the oases. In the long term, the team hopes to develop a methodology that can be used to replicate Urban Oases and build a plan for a network of oases spanning the city of La Paz.

Learn more about Sociedad de Historia Natural Niparaja (Niparaja Natural History Society) at niparaja.org, and watch the [team's proposal video](#).

Mycelium Healing Project ●●

Spirit of the Sun Denver, Colorado

This project targets the Northeast Denver Metropolitan area, where constituents primarily live in marginalized communities facing devastating air pollution, as well as water and soil contamination. Through educational outreach, this team will help revive yards and other patches of private land that have been long neglected and abused by major corporations and, in turn, empower local community members to become agents of change. This project strives to mitigate harmful pollutants in the soil, water, and air through mycelium (also known as mushrooms) by educating communities about the healing and restorative powers of mycelium via online and in-person workshops. By working with the community to 'plant the water' and mycelium to enable local ecosystems to sequester carbon and metabolize pollutants before they leach into the atmosphere and watershed, the team will increase local ecosystems' ability to sequester carbon and metabolize pollutants before they leach out into the atmosphere and watersheds. Additionally, this work will help ensure the stewardship of flora and fauna on the affected lands, promoting food sovereignty and Indigenous cultural education:



The team's mycelium curriculum is based on Traditional Indigenous Knowledge supported by science. The team plans to use the knowledge and cultivation of mycelium to improve community health and the health of ecosystems while driving economic growth for the local area. Team partners include local farmers and parks stakeholders, who will help expand mycelium applications, connect participants to gardening and conservation workshops, and build bridges to employment opportunities. The project's goal is to help Denver BIPOC communities heal from harmful pollutants in soil and increase standards of living overall. Environmental racism has always been an issue in the target areas and the Mycelium Healing Project seeks to provide constructive ways for the community to directly intervene in the normalized toxic environments they are subject to every day. This proposal provides a tangible solution to the issues of toxic air and land caused by energy producers in these neighborhoods and can be replicated in other urban environments and lands that have been exploited for mining or face other factors, including erosion.

Learn more about Spirit of the Sun at spiritofthesun.org, and watch the [team's proposal video](#).

Building Underpass Greenways (BUG): A Micro-Pilot Demonstration Combating Polluting Infrastructure ●●



THE POINT Community Development Corporation Bronx, New York

Hunts Point is part of Bronx Community District 2 with an approximate population of 70,000 residents as of 2018. An estimated 30% of the population is foreign-born and Hunts Point is largely a community of low-income people of color. The neighborhood is bordered, in part, by the Bruckner Expressway, and other bisecting highways, including the Major Deegan and Cross Bronx Expressways. Polluting infrastructure like the Bruckner has created detrimental challenges for communities like Hunts Point: poor air quality, flooding, extreme heat, noise pollution, and lack of safe public access and connectivity. This project team will use THE POINT campus, which serves as a safe space for individuals to gather and solve problems, to develop a pilot that demonstrates how nature-based solutions can reduce the impacts of polluting infrastructure, while working with the community to envision new uses for underutilized

and unsafe spaces in our communities. The proposed Building Underpass Greenways (BUG) project is a macro-scale vision for achieving these goals. It will focus on poor air quality, flooding, extreme heat, unsafe connectivity, and lack of green spaces caused by gray infrastructures like the expressways. The team will convert an existing fence on Garrison Avenue, which faces the Bruckner Expressway, into a green wall with a rainwater harvesting system that collects water from the roof and uses a solar powered irrigation system to feed the wall and other vegetated spaces. Team members will engage with the community by making the space open to the public as a green haven and by creating learning opportunities around nature-based solutions; developing surveys and info sessions to collect community input and local data; and employing an artist-in-residency to develop a public art installation that displays air quality and heat data. This project is one example of necessary infrastructure changes that cities around the world can and should make in order to mitigate the harmful impacts of climate change and polluting infrastructure in vulnerable communities. Locally, the team hopes this project can be scaled up in Hunts Point, and throughout New York City.

Learn more about THE POINT Community Development Corporation at thepoint.org, and watch the [team's proposal video](#).

Growing Pocket Forests for Climate Resilience ●●

TreePeople

Los Angeles, California

LA County's residents face persistent life-threatening challenges: a changing climate, water crises, extreme heat, air pollution, fires, and landslides. The Los Angeles Urban Cooling Collaborative, led by TreePeople, completed a modeling study of current and projected heat in Los Angeles County to identify geographic areas with the highest vulnerability to heat-related death, and to quantify the impact that different interventions would have on heat-related mortality. This research found that strategically increasing tree canopy cover and cool surfaces, especially in low-income communities of color, could prevent one in four lives from being lost to extreme heat in LA. Access to safe, shaded open green spaces is vital for building a greener, more resilient, equitable city. However, about 20% of LA city's tree canopy grows where only 1% of the population lives. This proposed project focuses on creating healthy, green, shaded public spaces in disadvantaged communities and communities with low tree canopy. Planting trees is the simplest, most cost-effective way to combat climate change. The pocket forest, inspired by the Miyawaki Method that has been modeled globally to increase publicly accessible urban green space for the community. It promotes



faster growth than the planting of individual trees, providing more significant benefits faster. For this project, TreePeople will directly engage local non-profit organizations, grassroots organizations, and community advocates to determine community needs and priorities. Early project planning and design will include regular presence of TreePeople organizers in local neighborhood council meetings and community-hosted gatherings. The project team will also host own public education sessions to boost awareness of the project and develop networks for community collaboration. The planting of the pocket forest will utilize TreePeople's community-volunteer model, with engaged leaders helping to gather and organize community members to co-host planting events that provide them with the wholesome experience of restoration. The project will create a community-based urban afforestation model that can potentially increase tree canopy in LA. It will also benefit the community by mitigating urban heat island impacts, increasing biodiversity, and building community capacity for tree planting and care. It will also fill the research gap by integrating green (trees)-blue (water)-brown (soil) infrastructure in the city for climate resilience-building. Additionally, communication and educational materials created from this project will be beneficial for future urban land management, environmental policy, and best management practices.

Learn more about TreePeople at treepeople.org, and watch the [team's proposal video](#).

Creating Microgreen Urban Farm Projects to Promote an Equitable and Livable City: The Shaw Community ●●

**Unique Learning Center
Washington, DC**

Urban farms have established themselves as a significant urban infrastructure system, in line with parks, in many cities. In some areas, urban farms have pioneered the use of underutilized land, creating value by transforming the



environment. With demonstrable urban farming success in other communities, this project team believes that the next step is a farming incubator model. If a farming incubator is placed in the right place, it will match under-used land with a population enticed by the prospect of small business ownership and other trade professions, with access to a major market through a predetermined transit line. This project will create a microgreen farm and use the space to engage kids in experiential learning related to sustainability. The farm will act as a model for a green economy by allowing students to sell the products grown in the space, creating an opportunity for infrastructure change through the establishment of an urban farm. But there could also be a regional economic change as well. In the long-term, urban farms and the green spaces they create have the potential to increase the quantity of permeable surfaces and urban flora, helping mitigate the urban heat island effect, regulating the flow of stormwater, and shifting the flow of waterways through cities. The Unique Learning Center hopes the microgreen farm project will demonstrate the impact that even a small urban farm can have on the sustainability and resilience of the larger city, inspiring broader adoption of this approach to education and green infrastructure.

Learn more about Unique Learning Center at ulcdc.org, and watch the [team's proposal video](#).

Cultivating Climate Resilience: Gardens & Greenhouses in Saint Paul's Rondo and Frogtown ●●



Urban Farm & Garden Alliance Saint Paul, Minnesota

St. Paul's Rondo neighborhood has been home to African Americans for generations. Growing up alongside other immigrant communities in the late 19th and early 20th centuries, Rondo was a diverse and thriving community. When the Federal Freeways Act passed in 1956 Saint Paul was primed to begin building Interstate 94 and the neighborhood was torn in two by the freeway. Families and businesses were displaced, intergenerational wealth was lost, but many community members stayed. Rondo has survived and, in many ways, thrived, despite the racism African Americans and immigrants, indigenous and other people of color face. The adjacent Frogtown neighborhood, historically made up of immigrants, is today home to Hmong and other Southeast Asian immigrants and refugees,

African Americans and Latino/a/x folks, among others. By joining forces, these communities grow stronger. A network of community gardens in these neighborhoods are home to plant, human, and animal communities. They create community health and wealth by providing space to grow culturally appropriate and healthy foods close to home. The community-owned land also helps mitigate the effects of gentrification, building infrastructure by and for current residents, and the gardens foster intergenerational and intercultural relationships that build resilient communities. And, as they retain stormwater runoff, plants absorb carbon, making for cleaner air, reducing the urban heat island effect, and creating spaces for people to build relationships with their neighbors. To secure these community benefits in the long-term, the Urban Farm & Garden Alliance aims to create a permanent, community-based stewardship and governance structure for the Frogtown and Rondo gardens. The project team is led by people born and raised in these neighborhoods who have dedicated their lives to organizing for change. Along with the Twin Cities Community Agricultural Land Trust, the project team has already built fruitful relationships in the community and with local government, universities, faith institutions, and non-profit organizations. By working for permanent access to land in the city and the tools to grow food and community, this project works toward an equitable and resilient future for Frogtown and Rondo and creates a model for allies.

Learn more about Urban Farm & Garden Alliance at urbanfarmandgardenalliance.org, and watch the [team's proposal video](#).

Utah Pollinator Pursuit: Connecting Pathways for Pollinators and People ●●●

Wild Utah Project Salt Lake City, Utah

The Jordan River and its tributaries in the heart of the Salt Lake Valley have long been neglected as surrounding human populations have grown and the region has urbanized. While restoration is underway to help the river recover from years of pollution and neglect, underrepresented communities—many of whom reside along the Jordan River ecosystem—have typically been excluded from this work. In response, the Utah Pollinator Pursuit aims to connect communities in the riparian corridor, address the degraded condition of the Jordan River, and remedy the lack of racial equity in local conservation efforts. Given environmental threats in the region



such as declining riparian habitat and general lack of greenspaces, the project team will also work to increase climate resiliency in the urban riparian ecosystem by restoring and developing pollinator waystations and greenspace along the urban river corridor. The team will also integrate its efforts into larger conservation projects in the region working toward nature-based solutions, like tracking declining pollinators and restoring pollinator habitat. In addition to helping rehabilitate the Jordan River and advancing important pollinator conservation, the project will connect nearby communities with the river through community science programs and educational outreach, improving access to the mental and physical health benefits of time spent outdoors. The project team will also work toward racial equity by bringing together community leaders and conservation organizations to co-create projects involving the Jordan River and the people who reside alongside it. Through this initiative, the Utah Pollinator Pursuit hopes to serve as a demonstration of how key players working together across municipal lines can make a positive impact on the wild-urban interface while including underrepresented communities as full partners on such projects.

Learn more about Wild Utah Project at wildutahproject.org, and watch the [team's proposal video](#).



Community-based mangrove conservation in Baja California Sur, Mexico ●●●

WILDCOAST

La Paz and San Carlos, Baja California Sur

In Baja California Sur, urban mangrove forests sink tremendous amounts of atmospheric carbon while maintaining coastal resilience for cities such as La Paz. To preserve these critical ecosystem services, WILDCOAST has helped Mexico's National Commission of Natural Protected Areas protect 8,454 acres of mangroves since 2008. However, a lack of local stewardship and climate change impacts continue to threaten these urban forests. To help ensure the long-term protection of the urban mangrove forests of Baja California Sur, WILDCOAST will collaborate with local partners to conserve an additional 3,808 acres of these carbon-storing ecosystems through a combination of biological monitoring using remote sensing, public education campaigns to increase awareness of the ecological importance of mangroves, and public stewardship workshops. The project will follow an established model for building conservation stewardship that centers on engaging key community members,

such as fishers and educators, through trainings focused on mangroves and fisheries enhancement; best tourism practices; biological monitoring of mangroves; use of WILDCOAST's specialized mangrove educational tool-kits; reporting of illegal activities; and the public consultation process. This project aims to empower community members to use the mangroves responsibly, understand how their conservation benefits local communities, and take steps to conserve them.

Learn more about WILDCOAST at wildcoast.org, and watch the [team's proposal video](#).

Restoring coastal dunes that protect communities ●●

World Wildlife Fund
Las Coloradas, Yucatan



The 2020 hurricane season was the most active in recorded history, and the Yucatan peninsula was affected by a record five hurricanes, impacting thousands of people. This project aims to reduce the vulnerability of the Las Coloradas community in Yucatan to coastal hazards, such as floods in the event of an extreme weather event, which are exacerbated by climate change. Working with local and international partners, including the Comision Nacional de Areas Naturales Protegidas (CONANP) and Universidad Nacional Autónoma de México (UNAM), WWF has developed a series of technical assessments to better understand the region's vulnerability to climate change and coastal hazards, and how nature-based solutions can help reduce this vulnerability. The team will work with the local Las Coloradas community to restore coastal dune vegetation that has been lost to coastal storms or removed to make way for infrastructure. These restoration efforts will recover key ecosystem services provided by the dunes—such as providing critical habitat to native species and protecting coastal communities

from erosion—and increase the community's climate change resilience. The project will include collecting seeds and propagules from healthy sites, growing plants in a greenhouse, and replanting them in degraded dune sites. In addition, an environmental education and awareness-raising component will help sustain the work over the long-term by building community members' knowledge of how to contribute to the long-term protection of the dunes.

Learn more about World Wildlife Fund at wwf.org.mx, and watch the [team's proposal video](#).

The Thriving Cities Challenge is supported by the Doris Duke Charitable Foundation, the VF Foundation, Blackstone Ranch Institute, the Bullitt Foundation, and the Kendeda Fund.



DORIS DUKE
CHARITABLE FOUNDATION



THE VF FOUNDATION



BLACKSTONE
RANCH INSTITUTE



THE
KENDEDA
FUND

SALAZAR **CENTER**
FOR NORTH AMERICAN CONSERVATION
COLORADO STATE UNIVERSITY

*Generating new solutions to challenges in
landscape connectivity in North America*

salazarcenter.colostate.edu | csusalazarcenter@gmail.com