



Green Cincinnati Plan
2023

FOCUS AREA

Natural Environment





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Natural Environment

Enhancing ecosystems and green infrastructure to improve health and well being.

Vision

Cincinnati will invest in the creation, preservation, and regeneration of ecosystems and green infrastructure through policy and resource allocation to improve and protect the health and well-being of our diverse residents and the natural environment. We will inspire people, government, and business to value the natural environment to drive transformation.

A Word from Dave Schmitt, Natural Environment Focus Area Chair

I was deeply honored to be asked to Chair the Natural Environment Subcommittee for the 2023 Green Cincinnati Plan (GCP). I also want to recognize the immense contributions of my partners, Amanda Testerman of the Office of Environment and Sustainability, and Margaux Roberts, our Equity Committee liaison. The work of our subcommittee truly would not have been possible without them.



A team member with Cincinnati Parks prepares a tree for planting in Mt. Echo Park. Increasing the urban tree canopy is an important goal for Cincinnati Parks. Photo courtesy of Cincinnati Parks.

I also chaired this subcommittee for the 2018 GCP, and feel gratified by the amount of progress we've made over the last five years. However, with the growing impact of climate change—and the growing recognition of past inequities—we've got more work to do...and we will do it. Our

Mayor, Council, and city administration are united in their passion and energy to work, along with many willing partners, to make real and enduring progress.

Our subcommittee focused on all of the natural resources that make up Cincinnati's environment and the challenges they face: water quality, overland flooding, greenspace access, tree canopy coverage, and air quality.

Through three public meetings we gathered knowledge and suggestions (in-person and online) from residents, organizations, local experts, and companies across Cincinnati. Both the GCP and our committee benefited from the tremendous interest shown by the public. There is simply no substitute for the lived experience of our residents and their knowledge of threats and opportunities.



The Mill Creek Alliance hosts paddling and fishing trips on the Mill Creek to engage the public in the resurgence of the watershed as a natural and community asset. Photo courtesy of Mill Creek Alliance.

Using this valuable input, our subcommittee developed aggressive Goals, Strategies, and Actions to protect and improve the health of our environment and residents. In particular, we focused on providing benefits to our priority communities which have suffered disproportionately in the past.

I work every day on the Mill Creek, which 25 years ago was declared “the most endangered urban stream in North America.” National experts said it would be impossible to restore it. Today, the stream is roaring back to life and is home to bald eagles, ospreys, game fish, beaver, and many others. We host hundreds of people every year on paddling, pedaling, and fishing trips along its shores. Because of this, I know firsthand that we CAN do this. We can restore and protect our natural environment and make its many benefits available to ALL of our residents. I look forward to working with you over the next five years to achieve—and surpass—these goals.

FOCUS AREA CHAIR



**NATURAL ENVIRONMENT
FOCUS AREA CHAIR**

Dave Schmitt

ORGANIZATION
Executive Director
Mill Creek Alliance

EQUITY LIAISON



Most importantly, that the voice of the people isn't lost in the political interests but true equity is the overall goal to create communities that thrive.

EQUITY LIAISON
Margaux Roberts

ORGANIZATION
Climate Safe Neighborhood
Community Organizer,
Groundwork Ohio River Valley

NEIGHBORHOOD
Bond Hill

Tree Canopy

Goal

Maintain 40% urban tree canopy while expanding canopy to 40% residential, 25% mixed-use/industrial, and 10% Central Business District.

BASELINE YEAR(S)

2020

DATA SOURCE(S)

Tree Canopy Assessment and Cincinnati Parks Urban Tree Canopy Dashboard

Strategy

Improve preservation, health, and maintenance of trees in existing urban canopy.

In 2020 the Cincinnati Park Board sponsored a study of urban tree canopy. The study showed the overall urban tree canopy of the City was 40%, but it also highlighted the inequity of urban tree canopy between neighborhoods. Areas with lower tree canopy experience increased heat island effect, have reduced stormwater retention, and increased areas of overland flooding. In addition to maintaining the existing tree canopy, the City must continue efforts to plant trees in neighborhoods with low tree canopy to reduce the heat island effect, increase native species, and offset carbon emissions.



Planting native tree species, like the Serviceberry, is important for supporting the health of native pollinators and animal species.

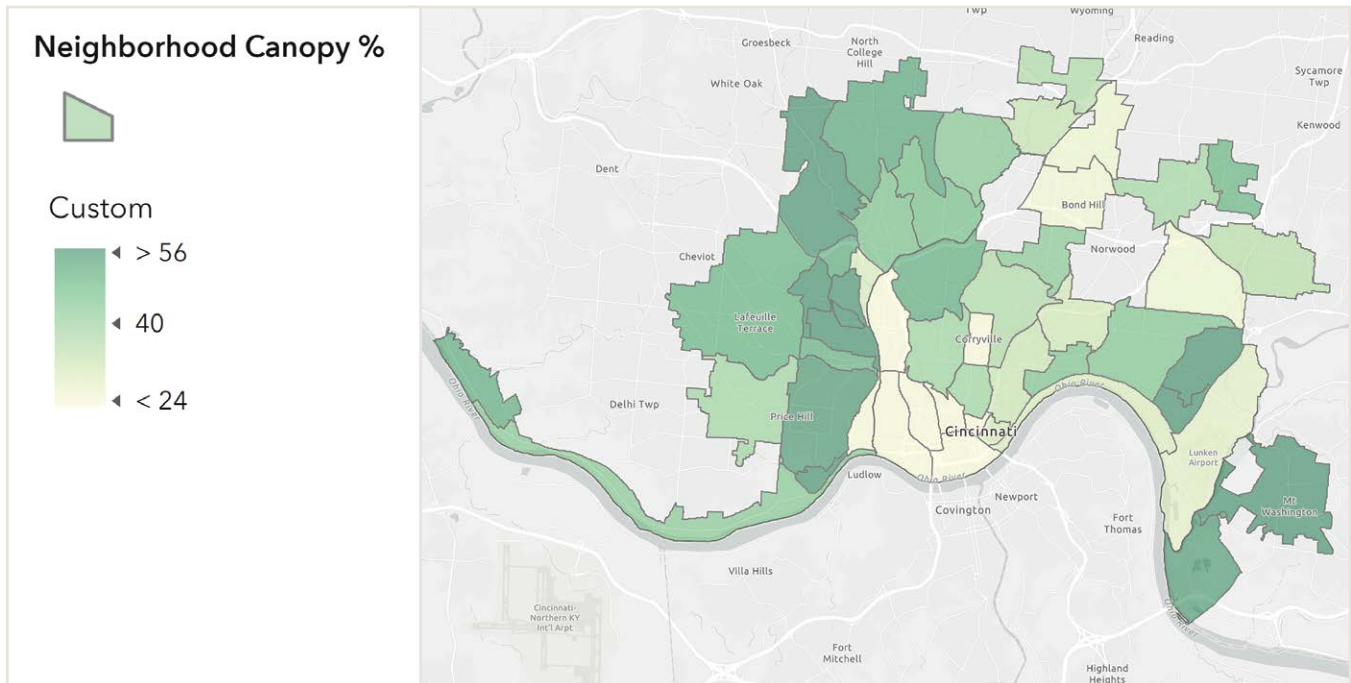


Students with Hayes Porter Elementary help plant new trees in the West End. Photo courtesy of Cincinnati Parks.

Priority Actions

	GCP PILLARS			ADDITIONAL PRIORITIES			
	Sustainability	Equity	Resilience	Jobs	Investment	Health	Feasibility
Focus city tree planting in neighborhoods with highest heat island effect as measured in the Climate Equity Indicators Report or most recent data	●	●	●	●	●	●	●
Provide incentives and support for the use of carbon crediting and/or carbon offset program to fund tree planting, maintenance, land conservation, and forest rehabilitation	●	●	●	●	●	●	●
Plant more native tree species through education with non-profits, nurseries, and schools	●	●	●	●	●	●	●
Implement policies that protect existing trees during development efforts	●	●	●	●	●	●	●

● strong alignment ● moderate alignment ● weak alignment





Air Quality

Goal

Improve air quality so that Air Quality Index “Healthy Days” are increased by 30% by 2028.

BASELINE YEAR(S)

5-year average 2018-2022

DATA SOURCE(S)

US EPA Air Quality Index Report



Natural corridors, like the trees and greenspace along the Ohio River, can reduce air pollution from between the source and nearby communities.

Strategy

Increase air quality studies and education and reduce pollution from air emissions.

Many Cincinnati residents experience poor outdoor air quality which contributes to adverse health conditions, including asthma and lung disease. In 2022, the US Environmental Protection Agency (EPA) registered 181 days with “moderate,” “unhealthy for sensitive groups,” or “unhealthy” air quality index ratings in Cincinnati. Ozone and Particulate Matter (PM) 2.5 contribute significantly to these low ratings. Other factors include vehicle emissions and industrial emissions. High air temperatures and ultraviolet radiation further exacerbate poor air quality. The City can improve air quality for residents by:

- Reducing the emissions generated within the City from buildings and gas-powered equipment
- Increasing the tree canopies and natural corridors surrounding neighborhoods.

We need more data and further studies to fully quantify the extent of poor air quality in Cincinnati’s neighborhoods. To improve the health of residents, the City must engage and educate residents to understand and reduce sources of poor air quality.

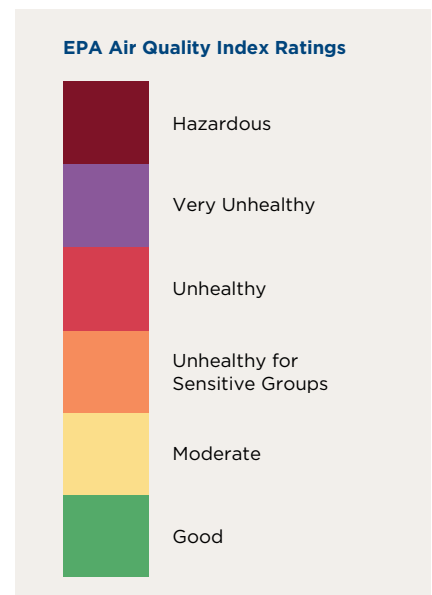
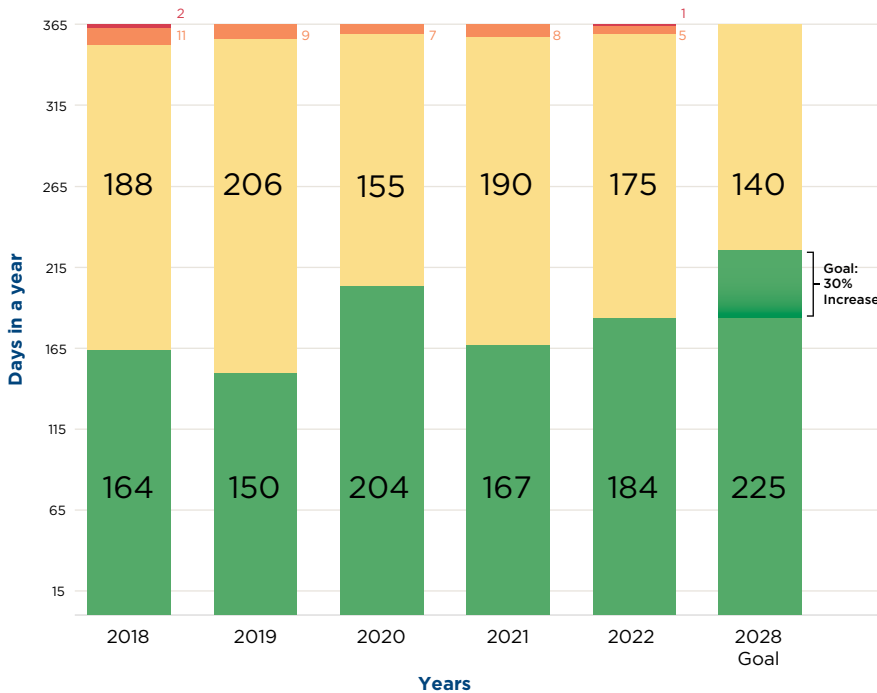
Priority Actions

	GCP PILLARS			ADDITIONAL PRIORITIES			
	Sustainability	Equity	Resilience	Jobs	Investment	Health	Feasibility
Expand monitoring of air quality and nuisance odors, incorporating citizen science in priority neighborhoods	●	●	●	●	●	●	●
Provide services, resources, and education for residents in priority neighborhoods on air quality alert systems, sources of poor air quality, and air quality regulations	●	●	●	●	●	●	●
Support and fund the development of natural corridors and tree barriers along streams and rivers, interstates and highways	●	●	●	●	●	●	●
Strengthen air emissions regulations	●	●	●	●	●	●	●

● strong alignment ● moderate alignment ● weak alignment

See Mobility and Buildings & Energy Focus Areas for actions supporting the transition to clean technologies like electric vehicles and buildings, and renewable energy.

Air Quality Index Days Per Year in Cincinnati





Green Space

Goal

Increase access to greenspaces so that every resident has a greenspace within a .5 mile walk by 2028.

BASELINE YEAR(S)

2022

DATA SOURCE(S)

Trust for Public Land ParkScore Index

Strategy 1

Increase the quantity and quality of greenspaces in neighborhoods with low distribution of greenspaces.

Greenspaces in Cincinnati take various forms, including parks, outdoor recreation areas such as ball fields and playgrounds, and natural areas like forests and preserves. In 2022 the Trust for Public Land (TPL) ranked Cincinnati #4 in the nation on its ParkScore Index. The TPL determined the ranking by analyzing the City’s park systems for acreage, access, investment, amenities, and equity. While this ranking is encouraging, it also highlights the need to center equity in greenspace investment. Cincinnati can do this by:

- Providing access to greenspaces
- Increasing distribution in areas with low greenspaces
- Engaging youth and Black, indigenous, and people-of-color (BIPOC) communities in these spaces.

Greenspace access

Percentage of Cincinnati residents living within a 10-min walk of a park/greenspace.



Priority Actions

	GCP PILLARS			ADDITIONAL PRIORITIES			
	Sustainability	Equity	Resilience	Jobs	Investment	Health	Feasibility
Create new greenspaces, including use of vacant properties and underused parking lots, ensuring that space will not be redeveloped	●	●	●	●	●	●	●
Continue to improve infrastructure to increase walkability and access to greenspaces	●	●	●	●	●	●	●
Grow greenspace workforce through youth and BIPOC involvement in natural area restoration and education	●	●	●	●	●	●	●
Increase funding for maintenance of greenspaces	●	●	●	●	●	●	●
Implement policies which promote and protect public greenspaces in new developments	●	●	●	●	●	●	●

● strong alignment ● moderate alignment ● weak alignment



Volunteers with Cincinnati Parks help to remove invasive honeysuckle and maintain parks and greenspaces. Photo courtesy of Cincinnati Parks



The Groundwork Youth Employment Green Team helps maintain the Rockdale Urban Learning Garden in Avondale. This urban garden was established through the Cincinnati Zoo and Botanical Gardens in partnership with local organizations and includes vegetables, fruiting trees, herbs, flowers, and native plants to attract pollinators. Photo courtesy of MadTree Brewing.



Green Space



Restoring and maintaining watersheds, like the Mill Creek and Little Miami, are important to improving water quality and biodiversity in the region.



Green roofs, like this one at the Cincinnati Museum Center at Union Terminal, are examples of green infrastructure which can mitigate the effects of stormwater and help keep contaminants out of waterways.

Strategy 2

Increase preservation and restoration of aquatic ecosystems & urban forests.

In addition to its highly developed and industrial areas, Cincinnati also boasts a variety of natural ecosystems, including the Ohio River; the Mill Creek and Little Miami watersheds; urban forests such as Mt. Airy, Burnet Woods, California Nature Preserve; and unnamed forested areas. These ecosystems provide multiple benefits like stormwater retention, reduced heat island effect, and public enjoyment. However, development, invasive plant and animal species, and pollution from combined sewer overflows and contaminated stormwater runoff threaten the health of these vital ecosystems. These threats are expected to increase in the coming years due to the impacts of climate change. The City must take action to prioritize and support the preservation of these ecosystems through policy, green infrastructure, and restoration.

Priority Actions

	GCP PILLARS			ADDITIONAL PRIORITIES			
	Sustainability	Equity	Resilience	Jobs	Investment	Health	Feasibility
Remove invasive species and restore, maintain, and preserve forests, wetlands, riparian areas, and natural corridors along waterways, hillsides, and low-canopy neighborhoods	●	●	●	●	●	●	●
Implement policies that restrict development in forested and/or biodiverse areas	●	●	●	●	●	●	●
Increase use of green infrastructure to mitigate the effects of stormwater, sewer overflows, overland flooding, and contaminated stormwater in waterways	●	●	●	●	●	●	●

● strong alignment ● moderate alignment ● weak alignment

Green Space



Eden Park is a greenspace which provides a variety of ecosystems, including pollinator-friendly perennials, forests, and open lawn for recreation.



Utilizing native pollinators and low/mow or no/mow techniques in place of grass along roadways or parking areas can support native species and reduces the pollution created through lawn maintenance.

Strategy 3

Increase biodiversity and health of native species in the City.

Hamilton County is home to five federally endangered plant and animal species and to more than 30 State-of-Ohio endangered species. But, we don't have enough data to know which species can be found—or can live—in Cincinnati. Therefore, the City must support the completion of a biodiversity assessment to understand the health of city ecosystems and prioritize conservation of vulnerable ecosystems. Engaging the public in native habitat building on private land can also support the health of plant, animal, and insect species throughout the City.

Priority Actions

	GCP PILLARS			ADDITIONAL PRIORITIES			
	Sustainability	Equity	Resilience	Jobs	Investment	Health	Feasibility
Complete Biodiversity Assessment for Cincinnati, incorporating citizen science	●	●	●	●	●	●	●
Support pollinator gardens, native plants, and education, including allowing the use of native grasses and pollinator plants in residential areas, and Low-Mow or No-Mow practices	●	●	●	●	●	●	●
Reduce pesticide and fertilizer use/over-use through education, regulation, and innovation	●	●	●	●	●	●	●

● strong alignment ● moderate alignment ● weak alignment