

THE GREENWAY IMPERATIVE

Connecting Communities and Landscapes for a
Sustainable Future

South Carolina Bike Walk Trails Summit

Charles A. Flink, FASLA

Photo by Jason Reyes



Our Only Home in the Universe

Earth's Biosphere

Earth's Biosphere



**POLLUTED BY
SINGLE-USE PLASTIC**

Extracting



Source: Sergey Milovido - Fotolia

Harvesting



Farming





Manufacturing

Source CNBC.com



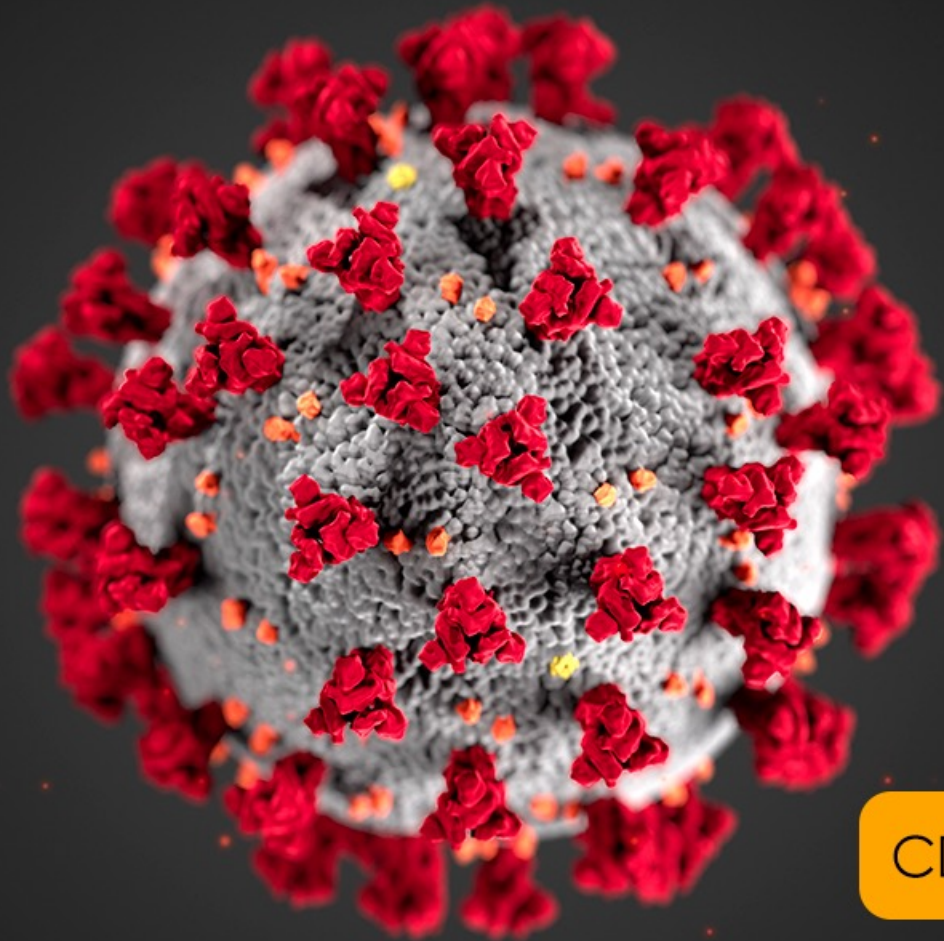
Building



Industrial Fishing

Species Extinction





[CDC.gov/COVID19](https://www.cdc.gov/COVID19)



Photo: Ted Richardson, VisitRaleigh.com



Photo: Mengxi Cao, 2017

BEST BETS

Safe places to go during the coronavirus crisis

BY MELISSA HOWSAM
Correspondent

While staying home is recommended as we navigate the uncharted territory that is COVID-19, there are a few safe places around the Triangle to get some fresh air while spreading out and maintaining your social distance.

Schedules and procedures are changing quickly these days, so check with the venue before you head out. For many parks, trails are open, but visitor centers and campgrounds are closed. Keep checking back: We're updating.

CAPITAL AREA GREENWAY TRAIL SYSTEM

Happy trails to you! A network of interconnected trails of 100-plus miles linking many of Raleigh's parks throughout the city provides ample opps for spreading out and walking, hiking, biking, birdwatching, nature study and more.

AMERICAN TOBACCO TRAIL

All aboard (spatially, of course). Converted railroad paths give way to 22-plus miles of trails across parts of Wake, Durham and Chatham counties at ATT, where you can hike or bike the day away on trails running through Durham, Cary, Apex, Jordan Lake and more.

UMSTEAD STATE PARK

A 5,500-plus-acre natural park paradise inside the city (accessible from I-40 and US-70) houses 20 miles of hiking trails surrounding three manmade lakes with fishing welcome on all lakes and connecting tributaries. Whether hiking, biking, running, fishing or horseback riding (the park has 13 miles of equestrian trails), Umstead is the primo choice to unplug, get your nature on and spend a day in the woods.

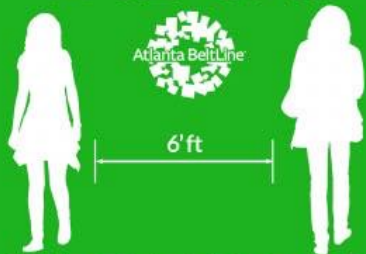
Insider tip: The 7.2-mile Sycamore Trail tops out as the park's longest, and a fave of many Umstead-goers; Big Lake is the largest; and, while several spots make the perfect place to



Art meets nature at the Ann and Jim Goodnight Museum Park outdoor installations so you can still get your art on with plant museum is closed, stroll by the iconic trio of Gyre rings.

GREENWAYS INC.
Site plan planning & design for urban spaces, parks, trails, & alternative transportation.

MIND THE GAP

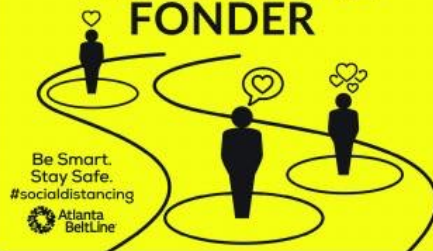


SIX FEET PLEASE!

Be Smart. Stay Safe. #socialdistancing

CLEARANCE ←6'-0"→

**DISTANCE MAKES
THE BELTLINE
FONDER**



BE SAFE! SANITIZE+ SEPARATE



Be Smart. Stay Safe.
#socialdistancing



PLEASE DON'T STAND SO CLOSE TO ME



Be Smart. Stay Safe. #socialdistancing



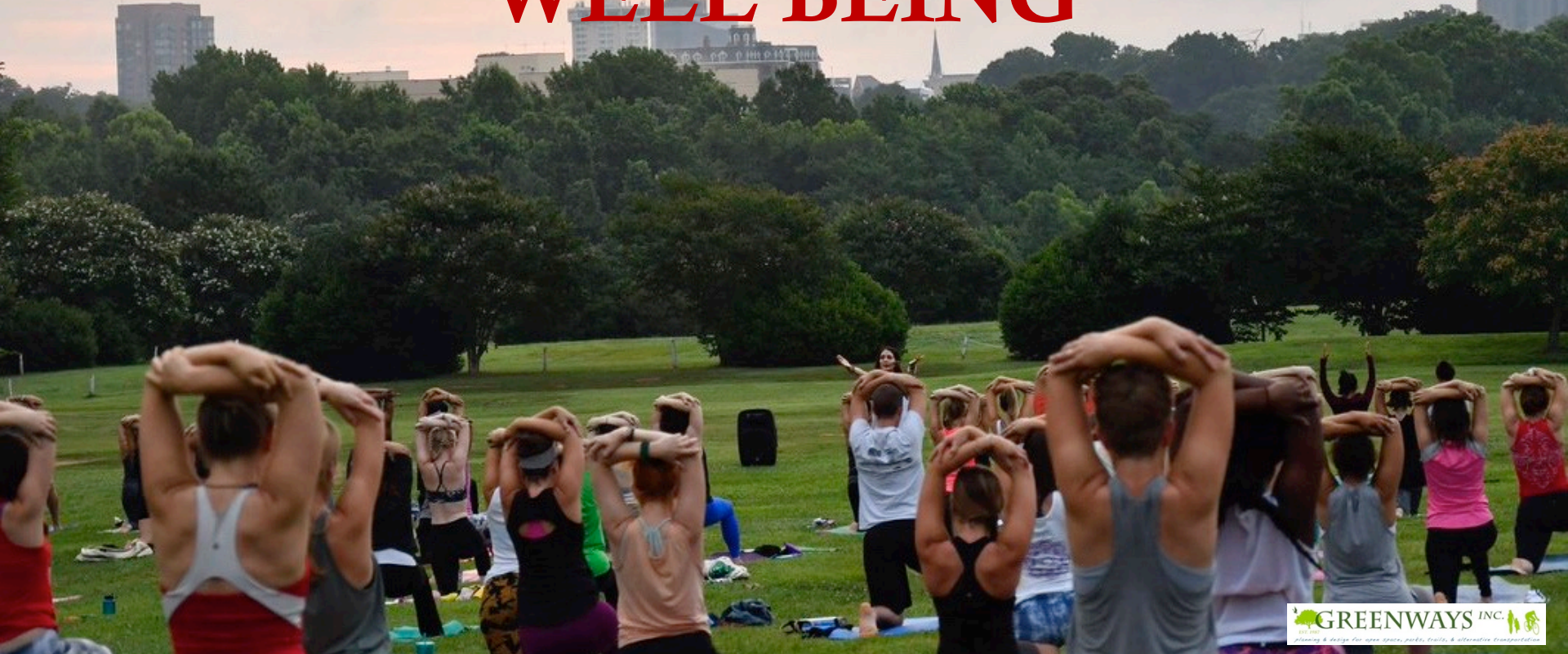
Surge in Trail Use

- **Connecticut Trail Census: 21 infrared sensors on rail trails; Hop River Trail in Bolton - 216% increase in use in March — 6,000 more users — compared to March 2019.**
- **RTC 31 trail counters: week of March 16–22: nationwide trail usage increase of nearly 200% from same week in 2019.**
- **Schuylkill River Trail - 28 percent increase and Delaware River Trail at Port Richmond, a 187-percent jump.**

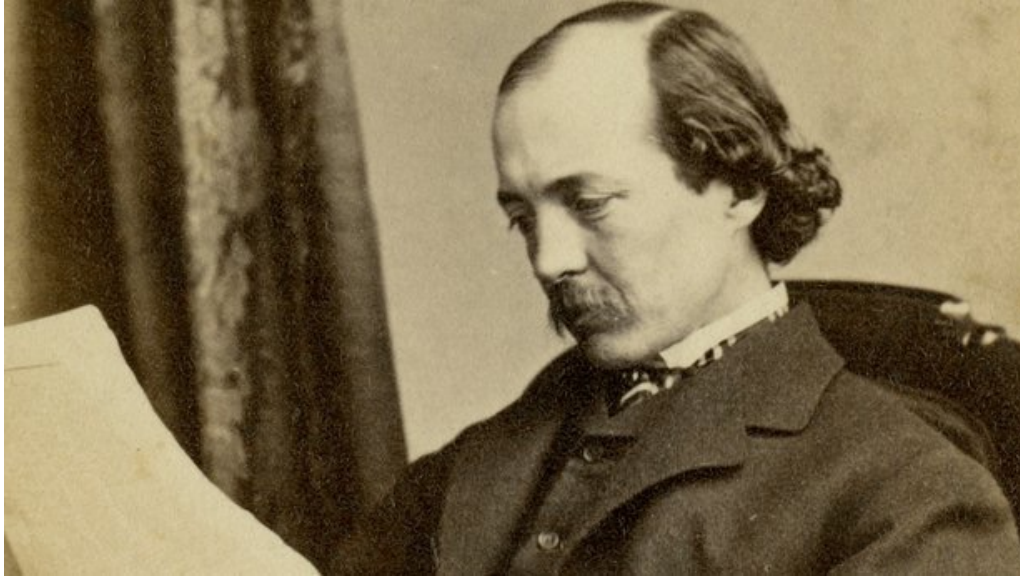
Surge in Bicycle Sales

- Bicycle sales surged **50 percent** in March, according to the NPD Group: a **121% increase** in adult leisure-bike sales.
- April sales for traditional bikes, helmets, and other accessories **grew 75% to \$1 billion** compared to last year. The first month since NPD began tracking the market that sales have reached **\$1 billion in a single month.**

HEALTH, WELLNESS & WELL BEING



F.L. Olmsted: Health and Wellness



As early as 1870, in his essay *Public Parks and the Enlargement of Towns*, landscape architect Fredrick Law Olmsted identified the strong link between good public health and community design and opportunities for exercise and access to fresh air and sunlight.

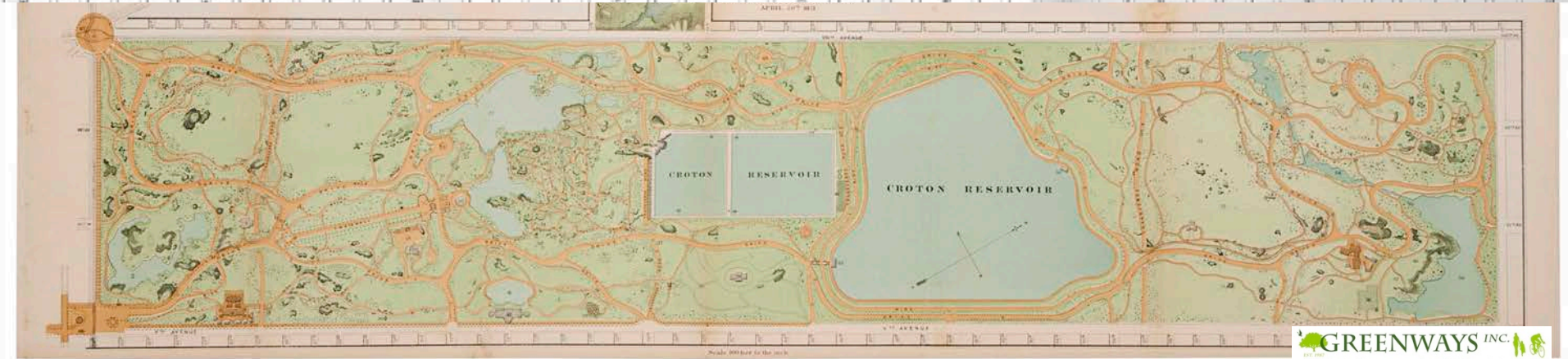
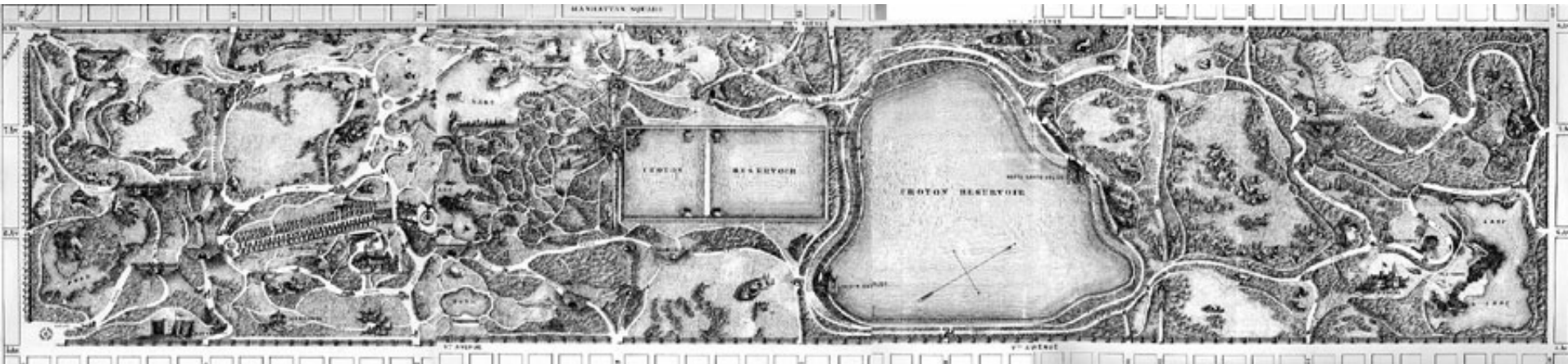


FL Olmsted Sr.



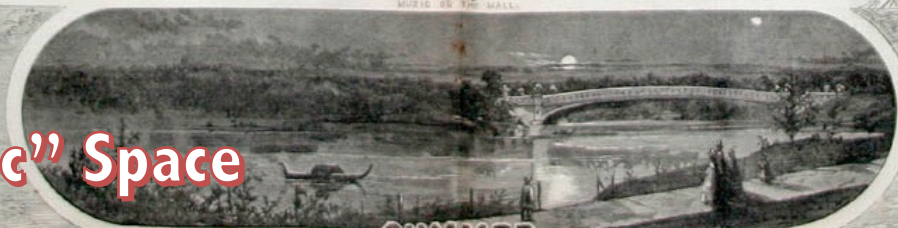
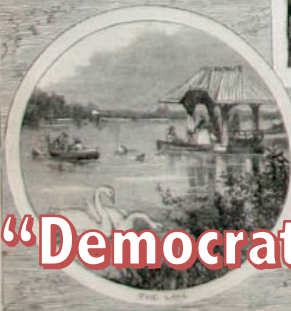
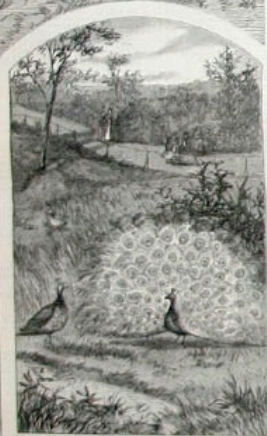
Calvert Vaux

“Greensward” 1858



Nature in the Heart of the City – “The Lungs of the City”





“Democratic” Space

Health Benefits of Trails

- Reduce obesity in all age groups
- Increase physical activity
- Control hypertension
- Protect against developing non-insulin dependent diabetes
- Improve symptoms of mild-to-moderate depression and anxiety
- Reduce the chance of premature death
- Reduce arthritis pain
- Prevent osteoporosis

(Centers for Disease Control, 2004)





Cover: The Reedy Creek Trail section of the East Coast Greenway (ECG) in Raleigh (by NCDOT/WalkBikeNC).
This page: The White Oak Greenway section of the ECG, at Bond Park in Cary.



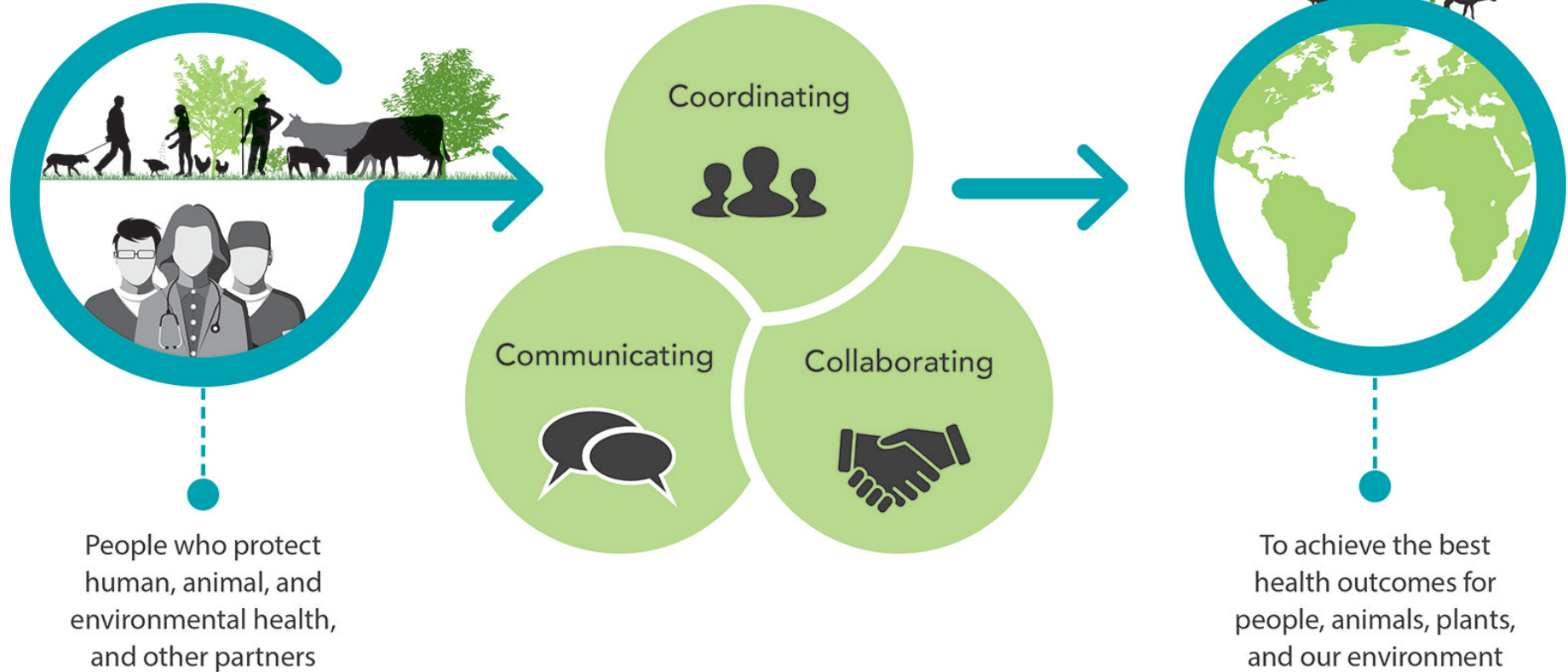
The Black Creek Greenway section of the ECG, at





**Human Health is Not the
Only Important Imperative**

One Health





Ecologist Aldo Leopold:

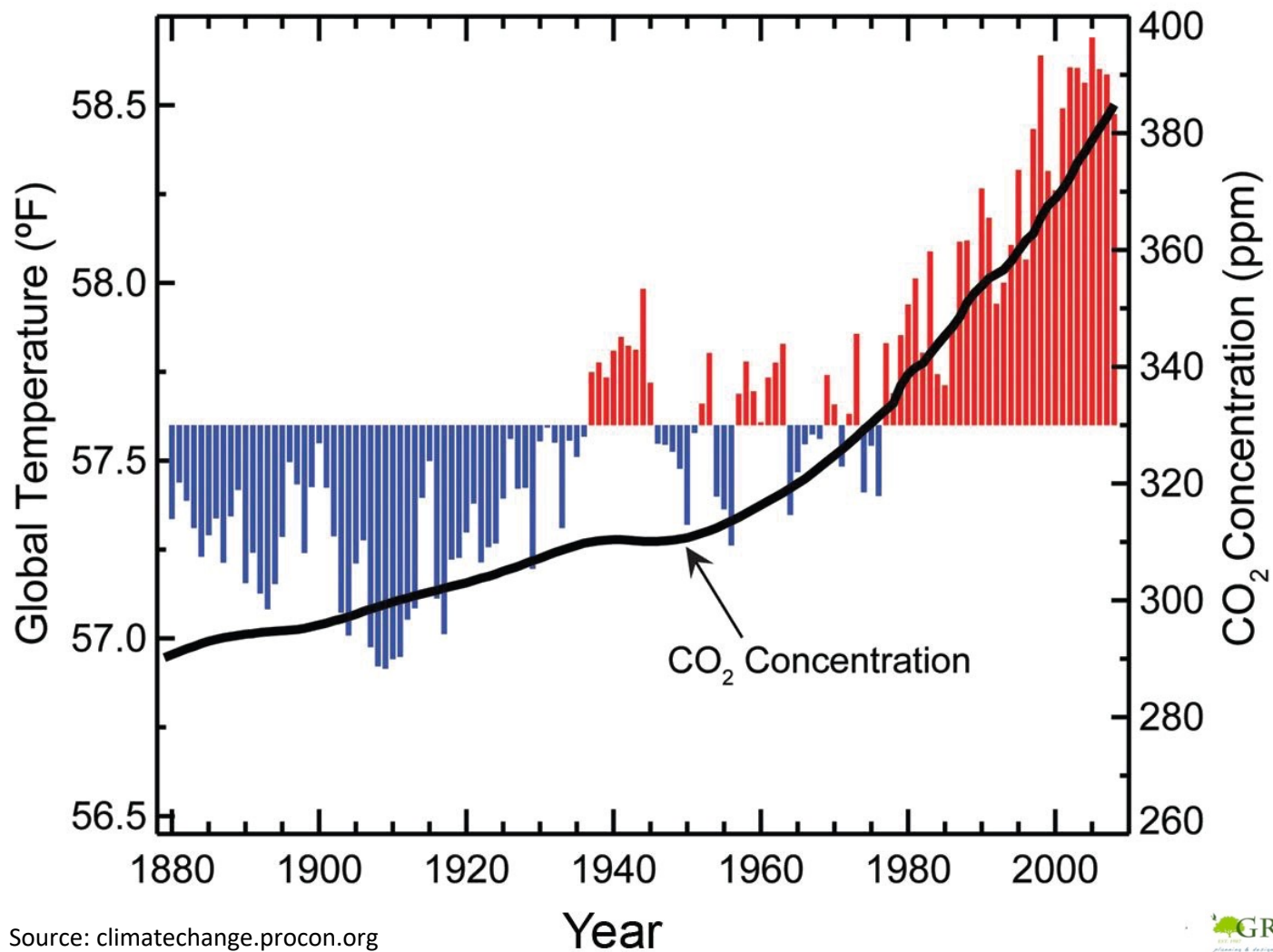
***“What’s good for our
body is good for our
ecosystem”***

*“We **abuse land** because we regard it as a **commodity belonging to us**. When we see land as a **community to which we belong**, we may begin to use it with **love and respect**.”*

Aldo Leopold, A Sand County Almanac



Global Warming

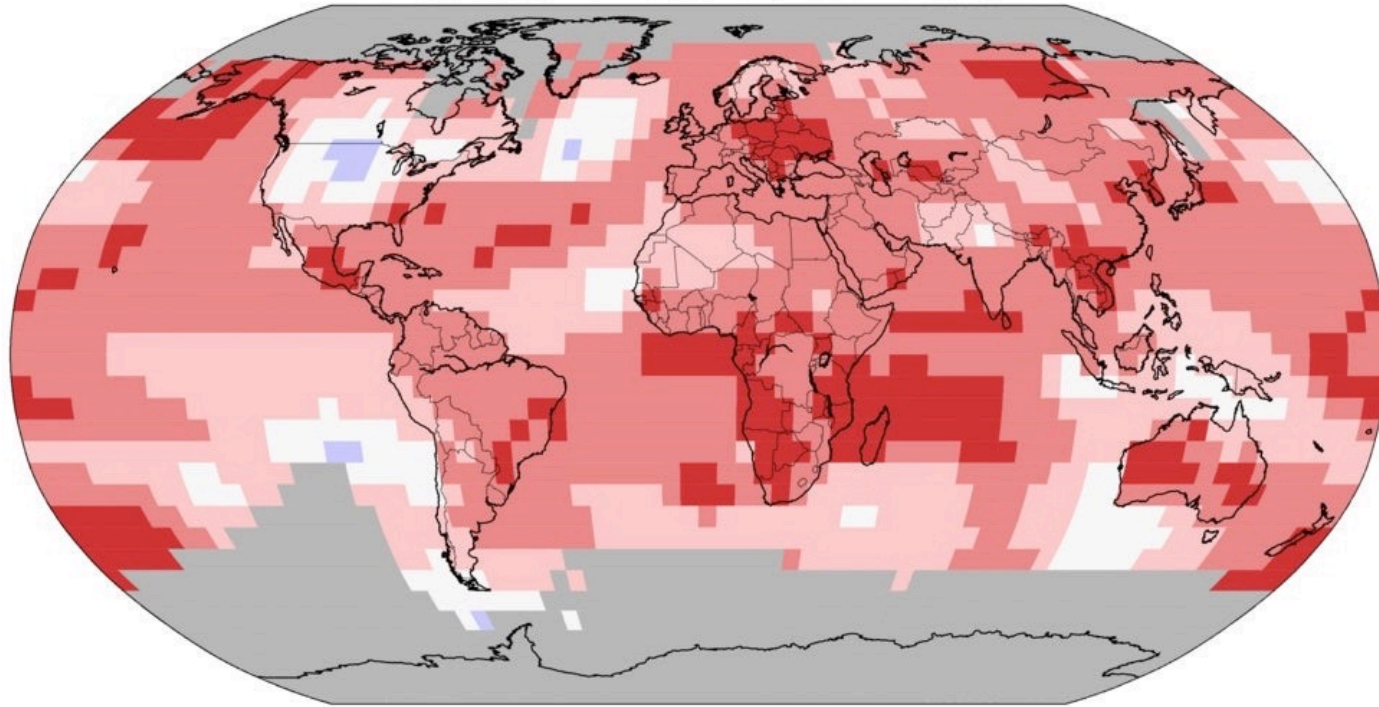


Source: climatechange.procon.org

Land & Ocean Temperature Percentiles Jan–Dec 2019

NOAA's National Centers for Environmental Information


Data Source: NOAA GlobalTemp v5.0.0–20200108




Record
Coldest


Much
Cooler than
Average


Cooler than
Average


Near
Average

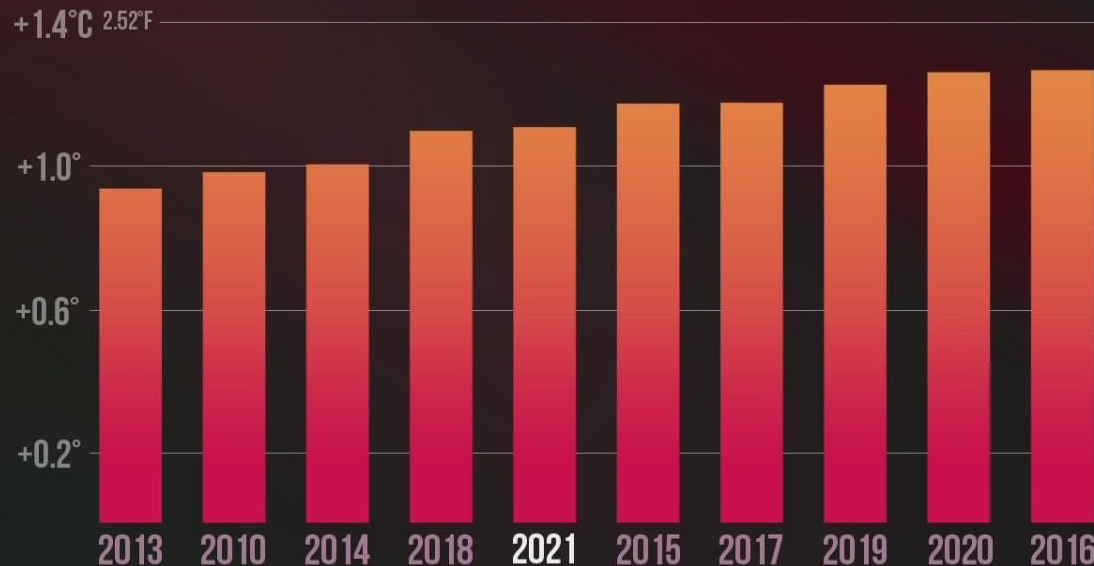

Warmer than
Average


Much
Warmer than
Average


Record
Warmest



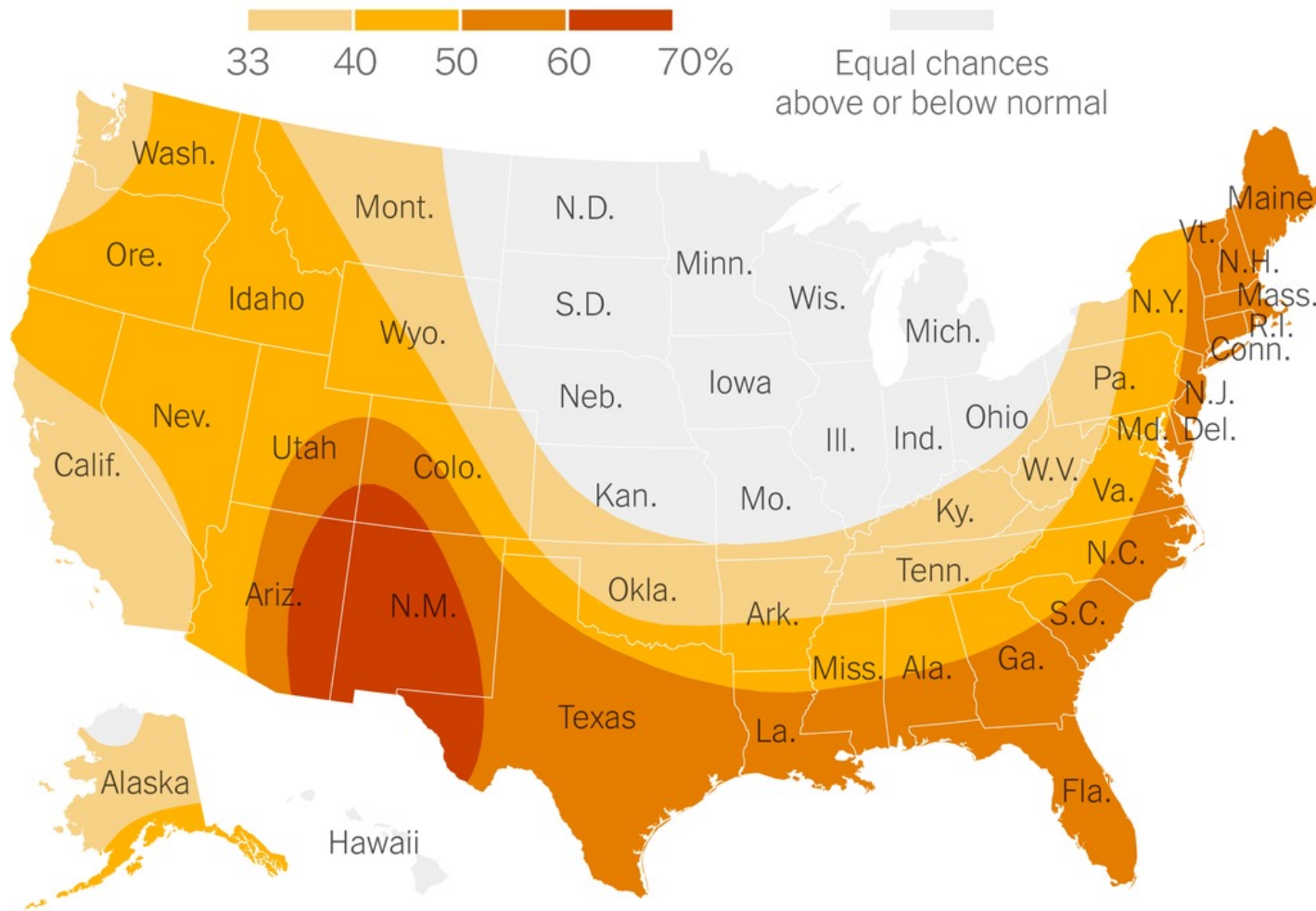
10 HOTTEST GLOBAL YEARS ON RECORD



Source: NASA GISS & NOAA NCEI global temperature anomalies, averaged and adjusted to early industrial baseline (1881-1910). Data as of 2022.

CLIMATE ACTION

Percent chance of temperatures above normal this summer



Climate change, an irreversible force, is adding stresses to the water cycle.



2/3rds of the Earth's land
already on track to lose water.



700 million
people could be affected
by extreme drought.





New Orleans 2005

Source: AAC RERC



Louisiana 2016

Source: NBC News



Houston 2017

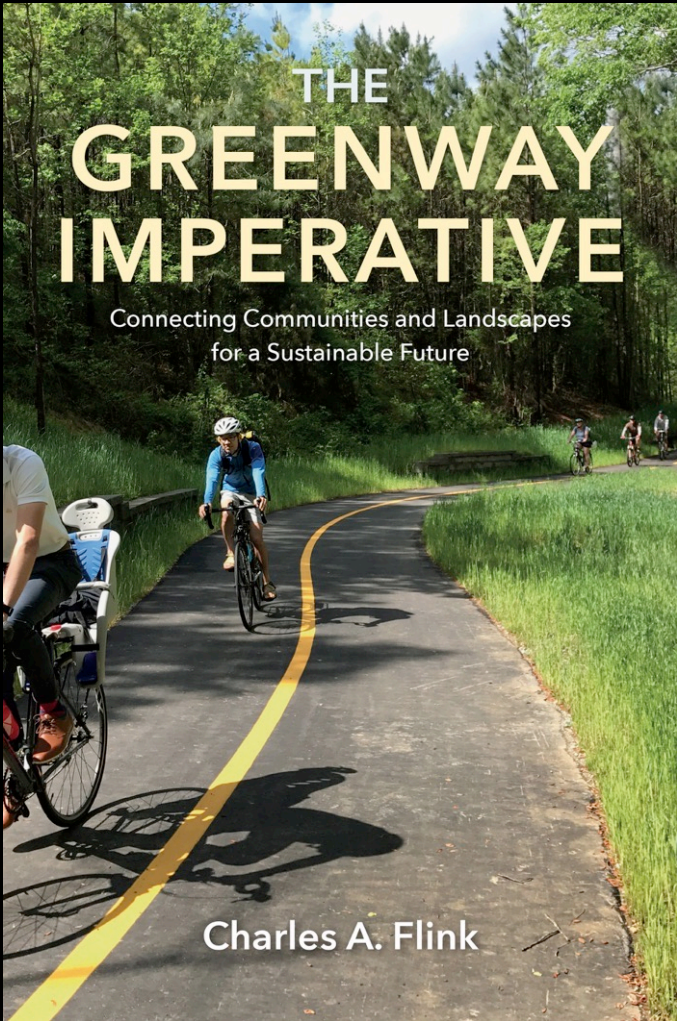
Source: Business Insider



North Carolina 2018

**“Water is the blade of
climate change that
will cut most deeply”**

David Festa, Environmental Defense Fund



THE GREENWAY IMPERATIVE

Connecting Communities and Landscapes
for a Sustainable Future

Charles A. Flink

Imperative

- . . . of vital importance, urgent, crucial (adjective)
- . . . an essential or urgent thing (noun)

Are greenways an imperative?

The Greenway Imperative

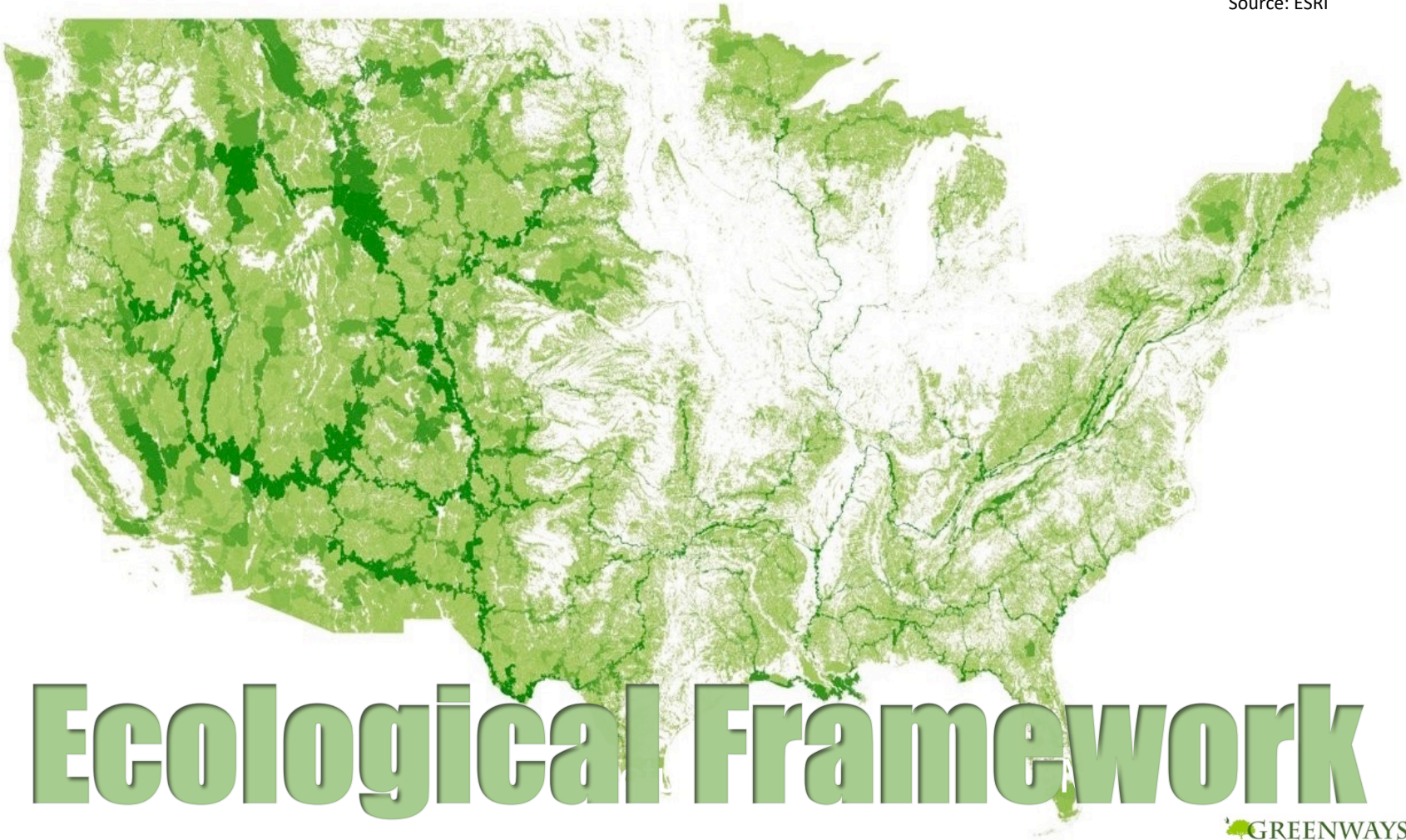
*“greenway development is a single **place making strategy** that produces multiple benefits by improving the economic, social and environmental health and the personal health of its residents . . . they create **healthier places for healthier people.**”*

Keith Laughlin, Former President of Rails-to-Trails Conservancy

Build a Resilient Framework for Nature and Civilization



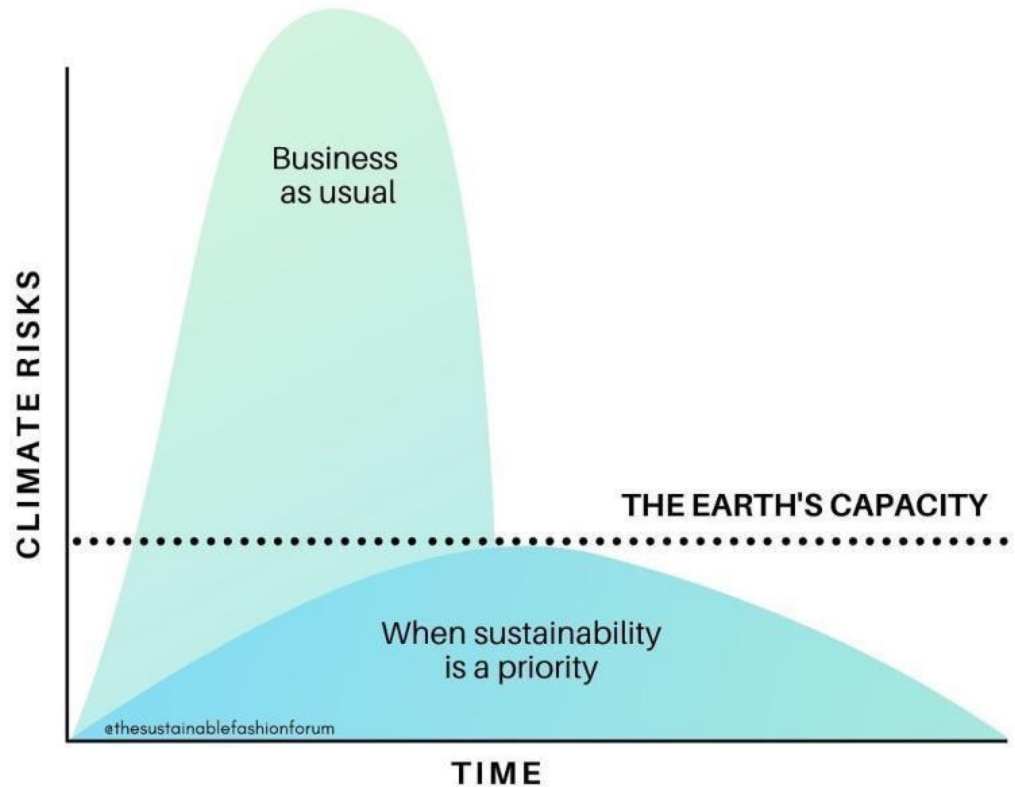
Source: Stoss New Urbanism



Ecological Framework

Can We Conduct our Lives in a More Sustainable Manner?

LET'S FLATTEN THIS CURVE TOO





Conserve our Planet's Natural Resources



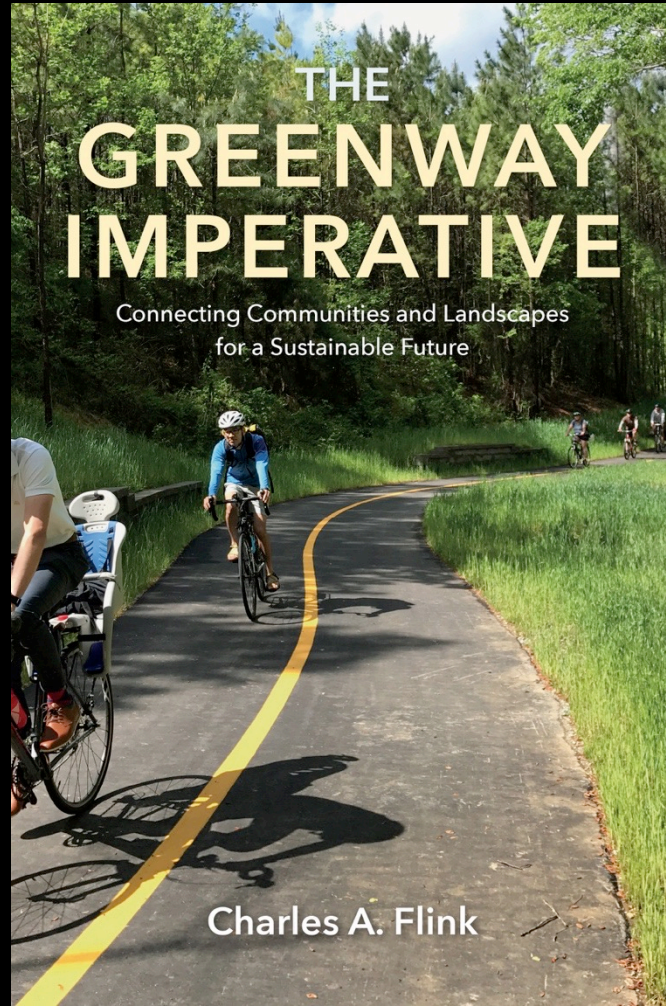
Water



Wildlife



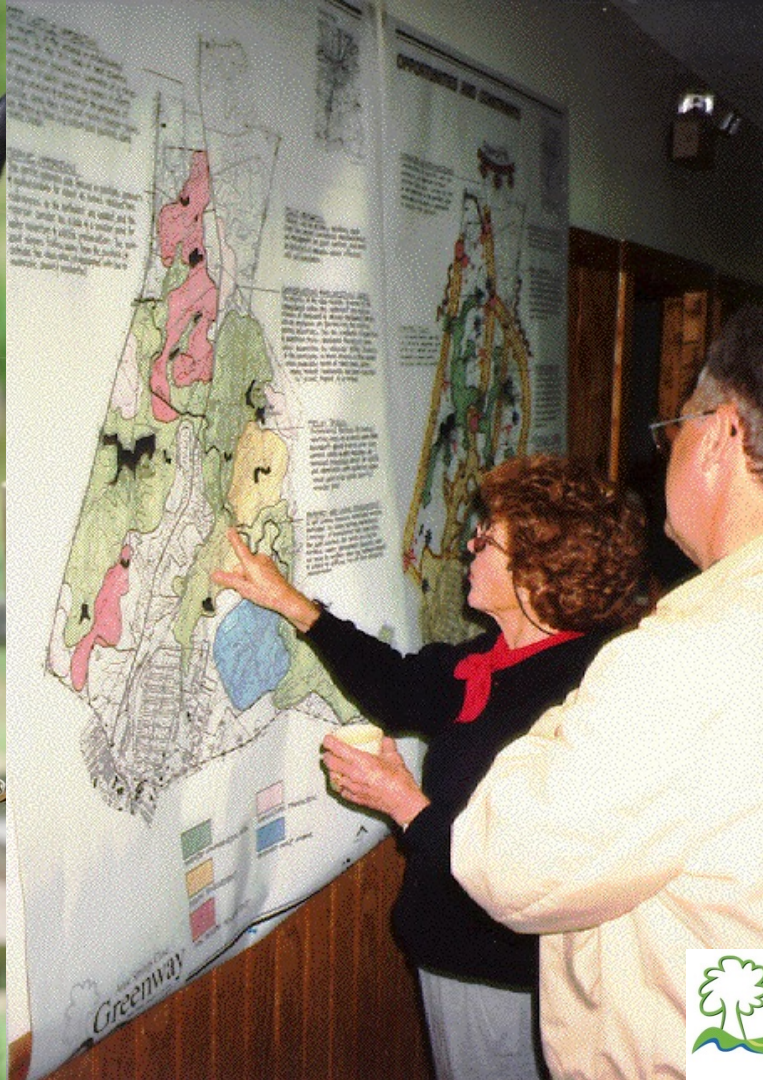
Lifestyle



Chapter One: *A Close Family Legacy; Anne Springs Close Greenway, Fort Mill, South Carolina*

ANNE SPRINGS CLOSE GREENWAY









Charleston County Greenbelts Plan

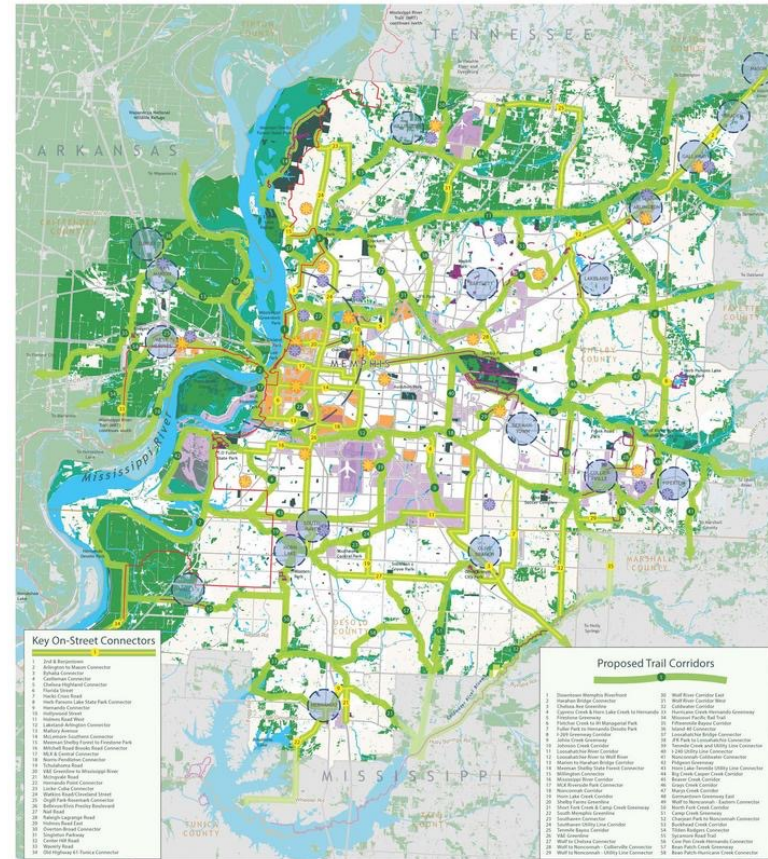


**Charleston County
South Carolina**

Greenprint

“Just as we would NOT consider building a house without a **Blueprint**, we should NOT continue to grow our communities without a **Greenprint**”

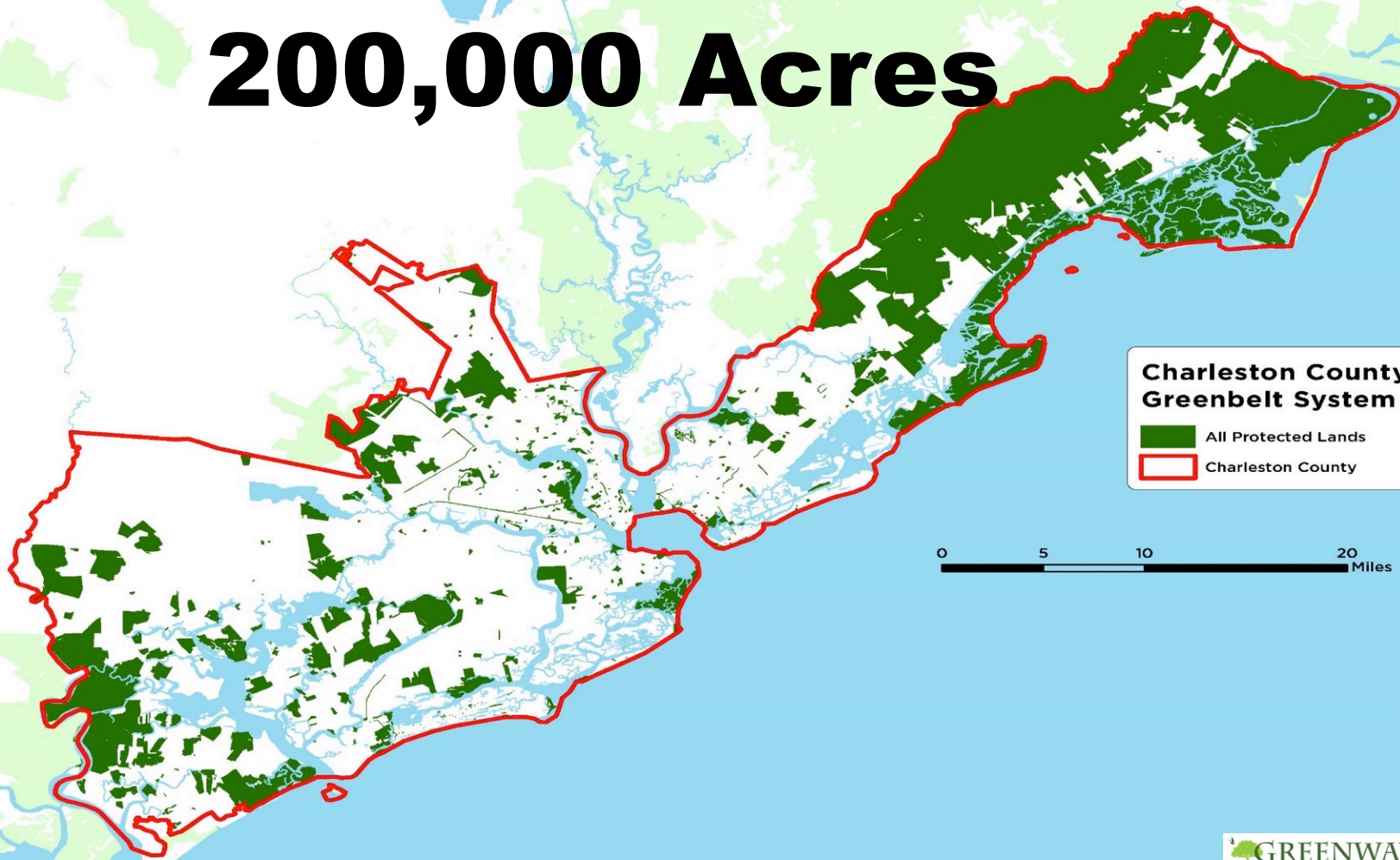
Flink 2000



Lowcountry Life



200,000 Acres



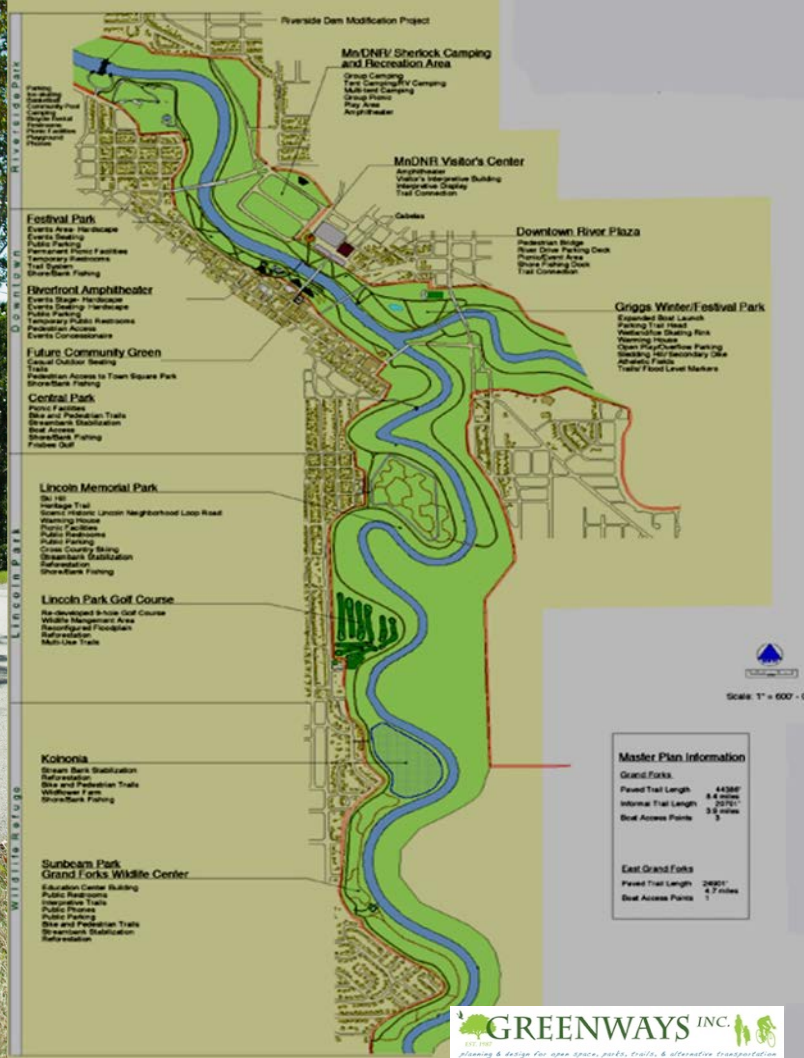
An aerial photograph of a river flowing through a city. A large steel truss bridge spans the river. In the foreground, a paved path leads to a circular plaza with a stone monument. The city skyline is visible in the background under a sunset sky.

Develop Resilient Communities

Grand Forks Greenway, North Dakota



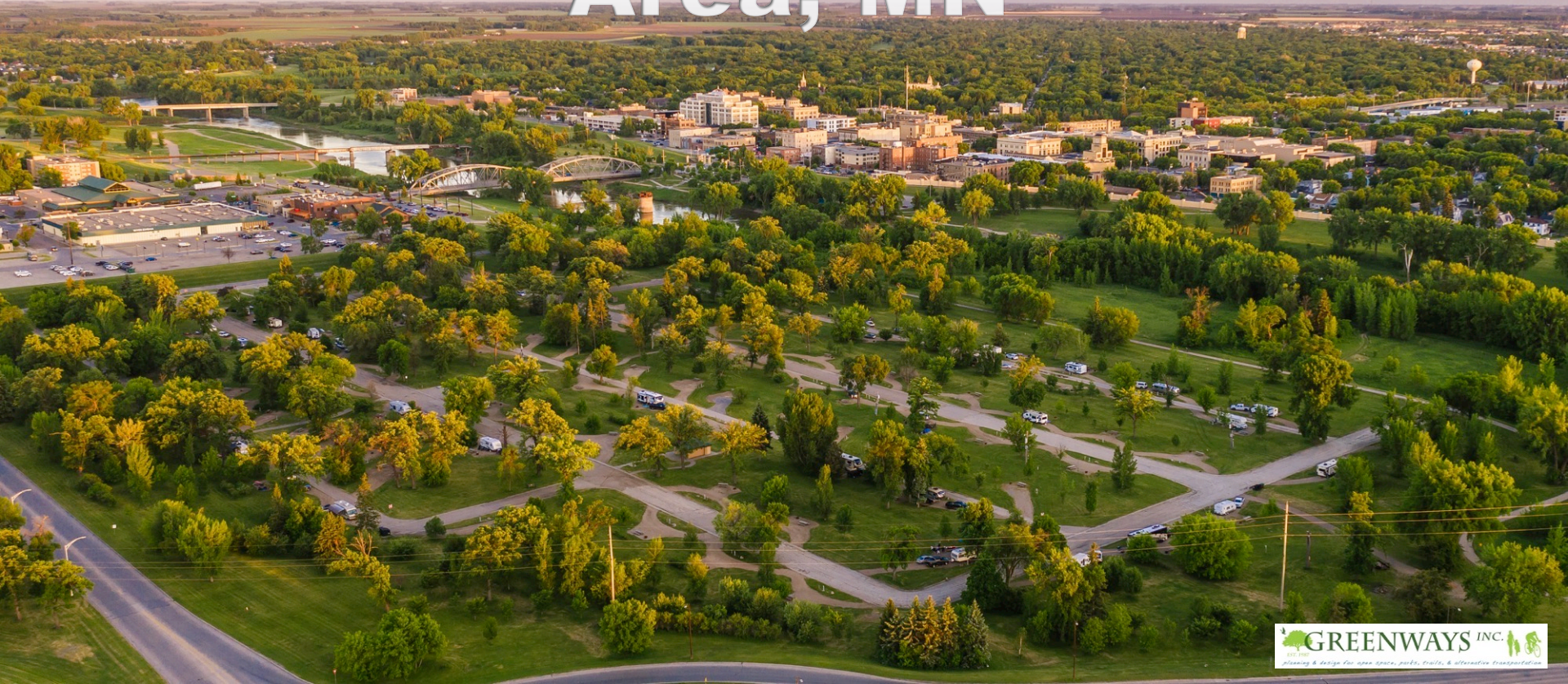
Source: Grand Forks Herald



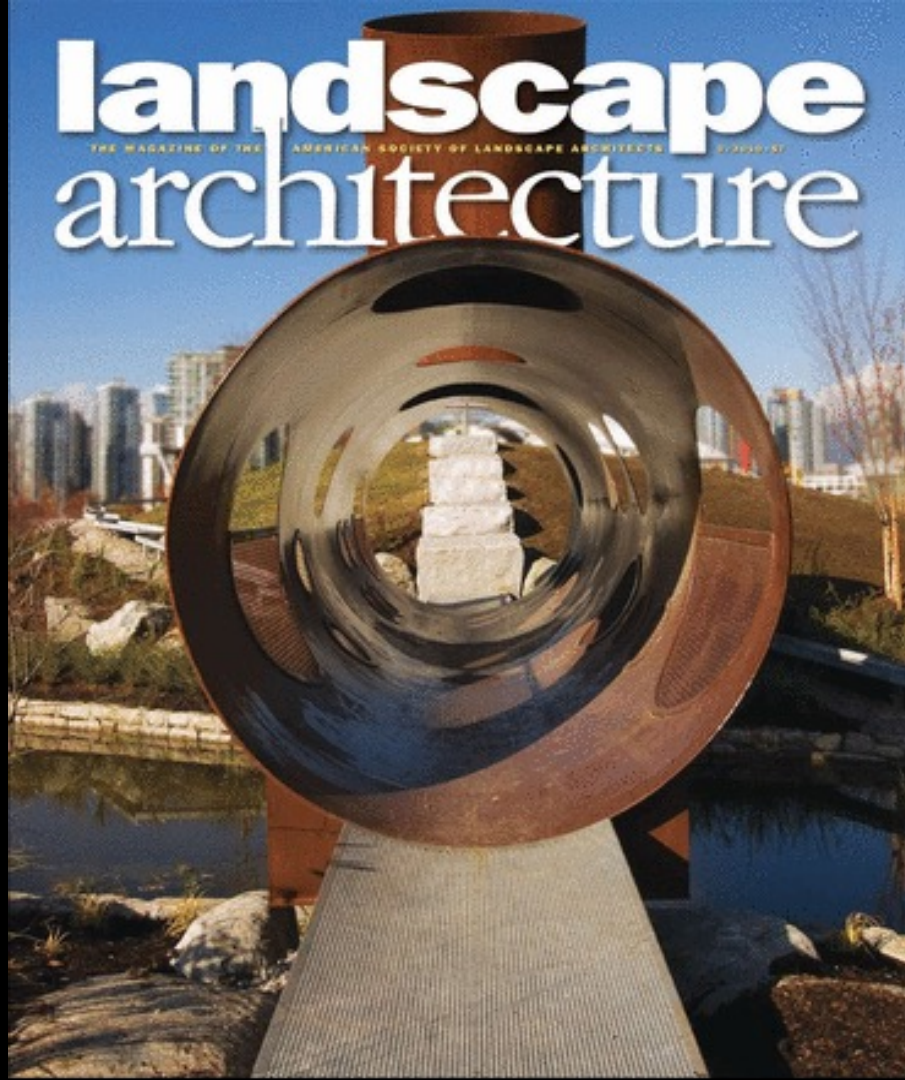


50,000 attended first "Greenway Day" in 2003

Red River State Recreation Area, MN





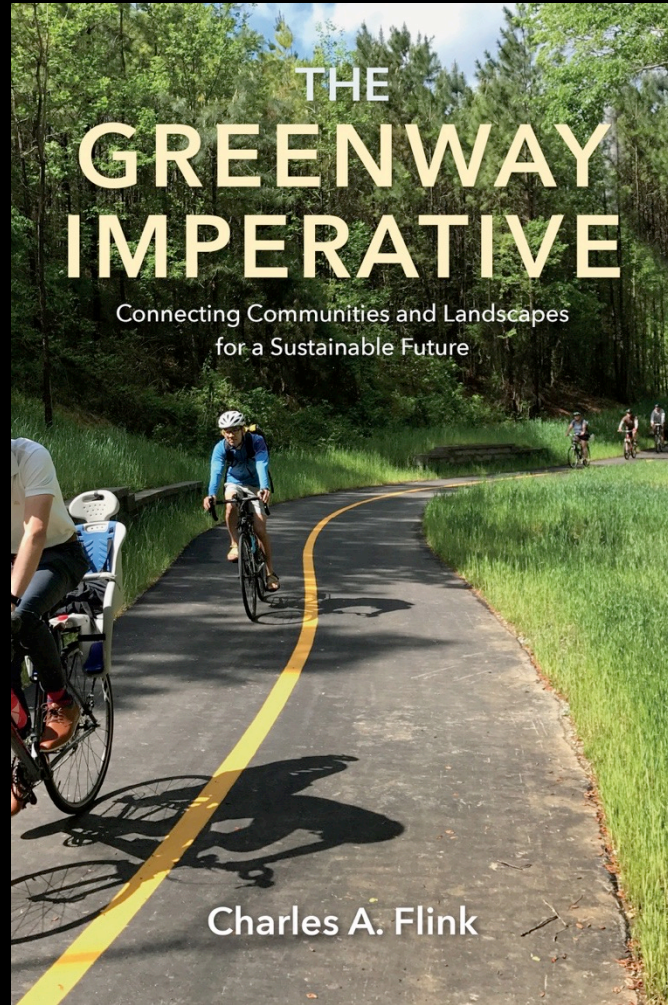


***“about the best
example we have
to date”*** when it
comes to flood
protection as a
public amenity

Kevin Holden, US Army Corps of
Engineers



Change the Culture of Communities



Chapter Eight: *Callin the Hogs; NW Arkansas Razorback Regional Greenway*



Northwest Arkansas, USA



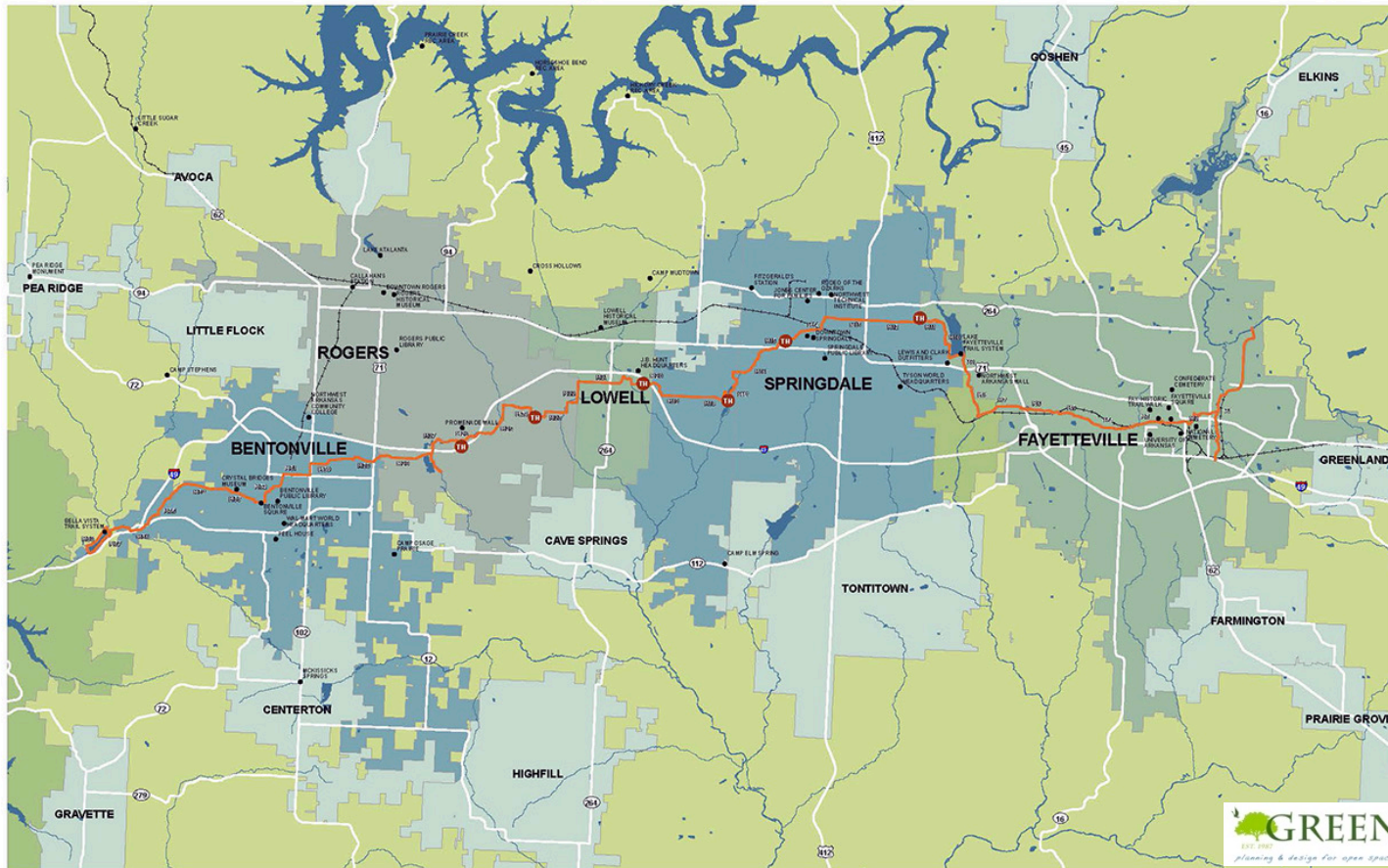
RAZORBACK GREENWAY



TRAIL

TH TRAILHEAD

M1 MILE MARKER







Cycle Tracks
Two-Way Cycle Track





HATFIELD LN

LUCIAN LN

POWELL ST

BROOKHAVEN CT

AVENUE CT

CHANNEL PL

GALLEON AVE

QUEENS DR

GREENWICH ST

NICHOLSON AVE

FAIRFAX AVE

MUELLER ST

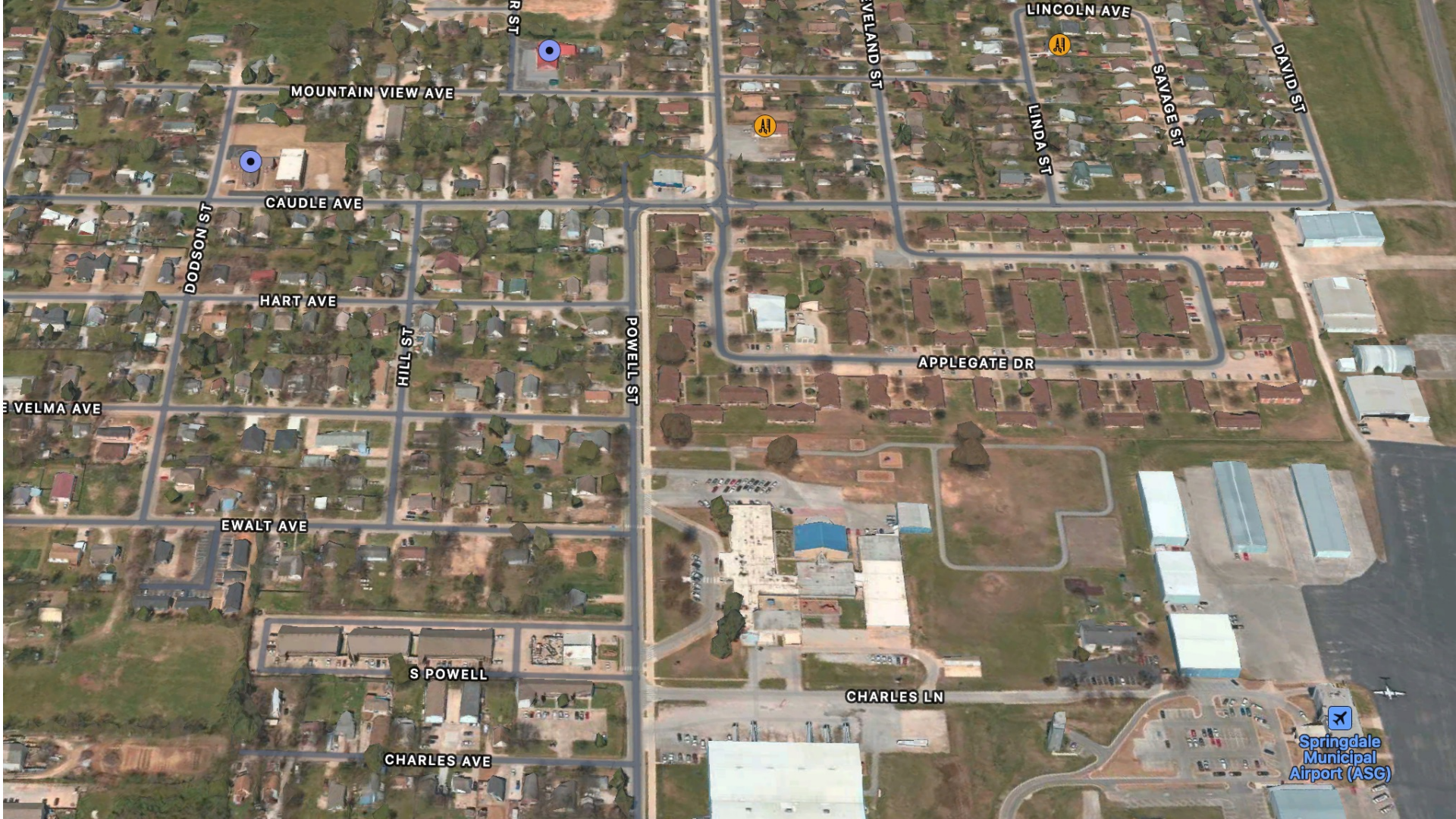
POWELL ST

ODYSSEY ST

KENESAW ST

BUCKHEAD AVE

CHATEAU AVE



R ST

MOUNTAIN VIEW AVE

CLEVELAND ST

LINCOLN AVE

SANAGE ST

DAVID ST

LINDA ST

DODSON ST

CAUDLE AVE

HART AVE

HILL ST

POWELL ST

E VELMA AVE

APPLEGATE DR

EWALT AVE

S POWELL

CHARLES AVE

CHARLES LN


Springdale
Municipal
Airport (ASG)





Walter Turnbow Park













Celebrate Culture and Diversity



Wolf River Greenway, TN





00:00:05

START²FINISH
EVENT MANAGEMENT

FINISH

START²FINISH
EVENT MANAGEMENT





Wolf River Greenway, Memphis



A Call to Action



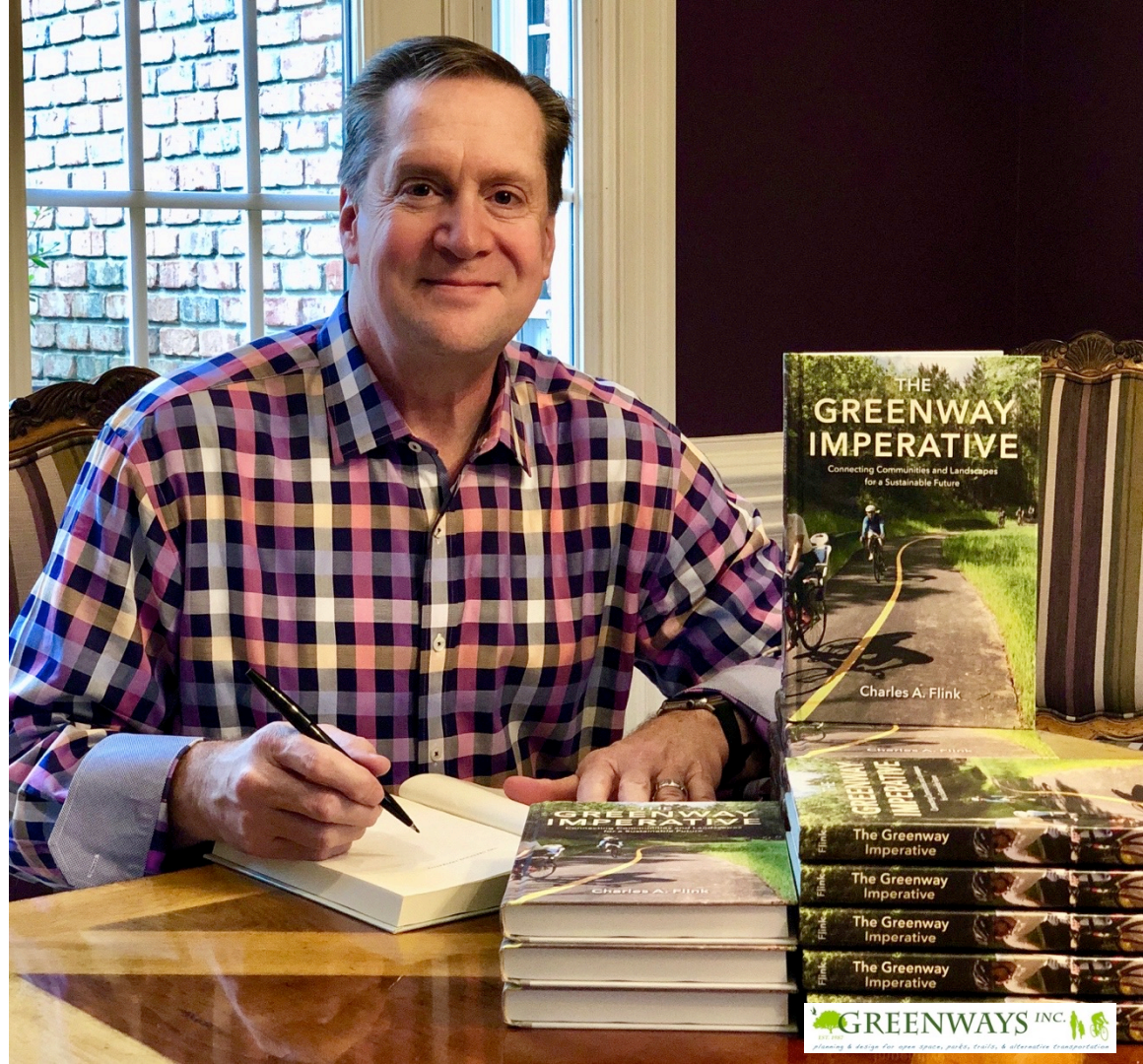
Purchase the Book



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OF FLORIDA

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\$20 in cash
17 signed books available



A group of cyclists is riding along a paved path that curves through a lush, green landscape. The path is bordered by tall grass and shrubs. In the background, there are more trees and a building under a bright blue sky with scattered white clouds. The cyclists are wearing various colored clothing and helmets, and some are carrying bags on their bikes.

Thank You

Best Wishes and Happy Trails !

