RESILIENCE!

SPRING 2025

NEWSLETTER OF THE BROWARD COUNTY RESILIENT ENVIRONMENT DEPARTMENT

KEEPING IT GREEN

The benefits of investing in green infrastructure

BROWARD COUNTY FLORIDA

RESILIENT ENVIRONMENT

IN THIS ISSUE...

Xavier Cortada addresses students at the Gulfstream Academy of Hallandale Beach

Underwater: Broward Art Project Extended into 2025

STATUS UPDATE

The Resilience Unit's work with eco-artist Xavier Cortada and Adam Roberti of the Cortada Foundation continues to expand the *Underwater: Broward* project, reaching an even larger Broward County audience in 2025.

Six public schools have been chosen to participate in this year's interactive workshops to educate students and teachers about their personal vulnerabilities to climate change and its impacts. Cortada is also currently designing a piece of mobile art to be installed on one of our transit buses, bringing engagement and education to the streets of Broward County.

This will add to the growing list of public art installations created by Cortada for Broward County residents, including an aluminum metal sculpture and tile mural located at Governmental Center East in downtown Fort Lauderdale.

SAVE THE DATE!

CLIMATE LEADERSHIP SUMMIT 2025

WHERE:
Palm Beach County Convention Center

WHEN:
DECEMBER 16–17, 2025

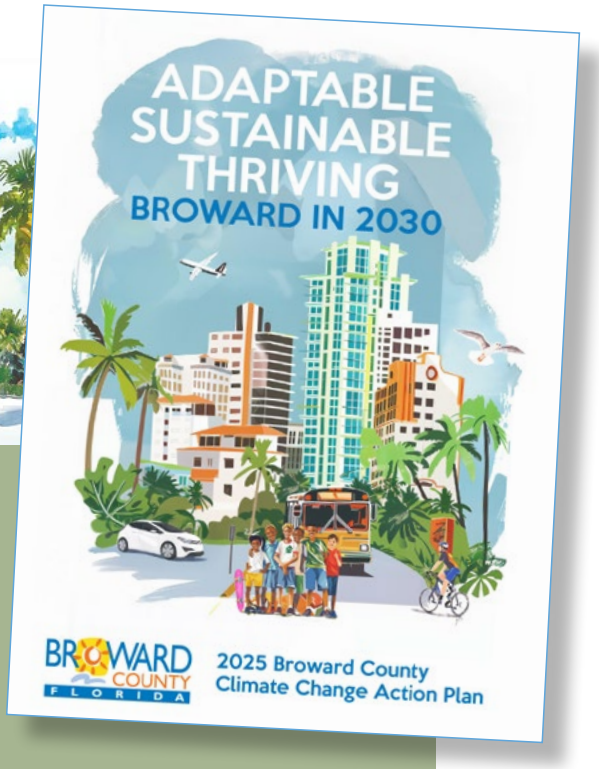
THEME
"Roots of Resilience: Cultivating a Sustainable Future"

The Compact is a partnership of Palm Beach, Broward, Miami-Dade, and Monroe counties that helps Southeast Florida continue to thrive while addressing shared climate change challenges.

The Summit is an annual opportunity for sharing innovative ideas, displaying successful climate initiatives, and fostering collaboration among leaders from various sectors.

This year's Summit aims to highlight impactful projects, further strategic planning, and leverage collective insights to tackle pressing climate issues affecting Southeast Florida.

Visit southeastflorida climatecompact.org / events/.



CLIMATE CHANGE ACTION PLAN

Now in its fourth iteration, the 2025 Broward County Climate Change Action Plan (CCAP) provides recommendations for countywide policy planning and actions to reduce greenhouse gas emissions and increase the resilience of our community, infrastructure, and natural systems.

This updated document presents 139 actions to reduce carbon emissions and strengthen resilience to the effects of global climate change.

The Plan reflects considerable effort on the part of the Climate Change Task Force members, community participants, staff, and experts who all lent support throughout the process. You can view the plan online here:
broward.org/climate

"There is no single solution to the climate crisis; therefore, our strategies continue to include modeling vulnerabilities and analyzing risks, thoughtful planning, developing sound public policies, convening support through stakeholder involvement, implementing projects, economic investments, plans, and strategies and actions that increase the resilience of the built and physical environment."

BEAM FURR
Mayor, Broward County

ADVANCING BROWARD COUNTY'S NET ZERO STRATEGY

Broward County's Net Zero Strategy continues to make steady progress, with key milestones reached since work began in August 2024.

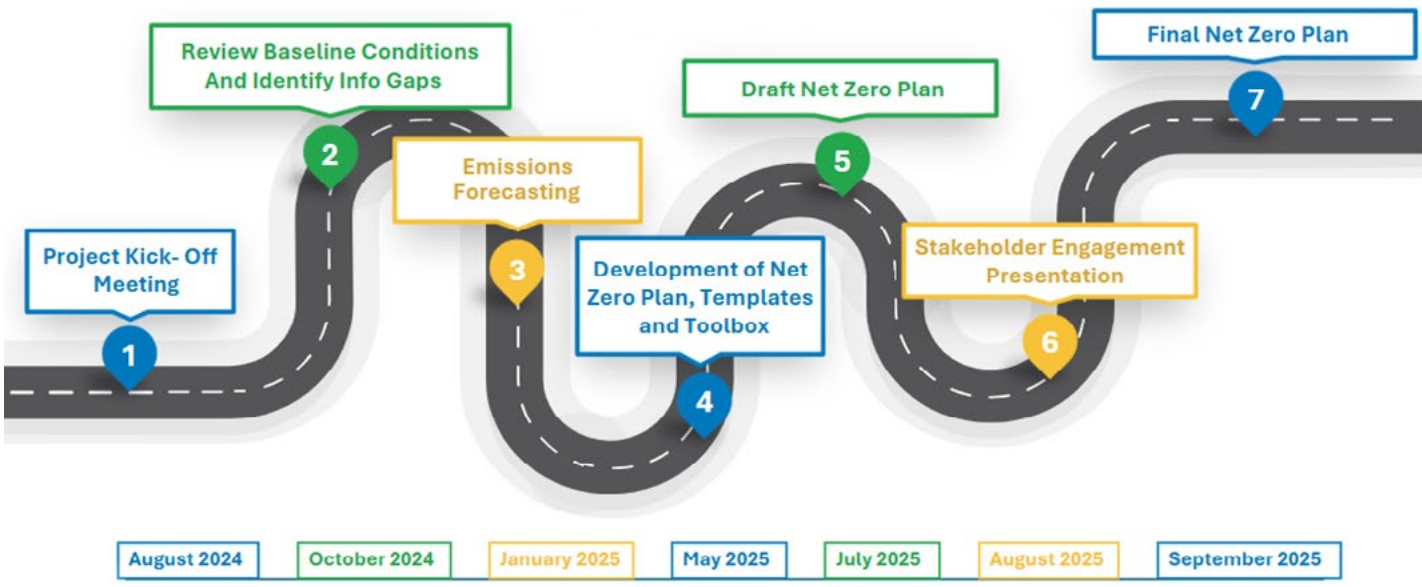
The consultant team has completed an initial assessment of energy use across government operations and the broader community, providing valuable insights as to where improvements can be made.

The next phase focuses on identifying strategies to enhance efficiency, reduce waste, and modernize systems. These efforts aim to improve air quality, lower energy costs, and support local businesses and residents in adopting more efficient practices.

The strategy also presents opportunities for economic growth by encouraging innovation and investment in both new technologies and trusted solutions. Collaboration across Broward agencies and municipalities have helped ensure that the recommendations are practical and achievable.

A number of templates will be created for municipalities and community sectors with general

Net Zero Plan Pathway for Broward County



recommendations for increasing efficiency and reducing waste. Should they wish to further refine their approach, cities within the County can leverage the County contract to receive additional technical services and guidance tailored to their own efforts.

With the baseline assessment complete, the project is now transitioning into the implementation recommendations phase. The team is working closely with stakeholders to craft realistic and cost-effective templates and tools for a shared net zero pathway.

As work continues, ongoing collaboration will be key to ensuring a healthier, more efficient, and forward-thinking Broward County.

For more information or to register visit *broward.org/climate/carbon.*

BROWARD COUNTY'S BUILDING A STRONGER FUTURE

The Broward County Resilient Environment Department has completed a landmark two-year project with the finalization of the Countywide Risk Assessment and Resilience Plan.

This detailed blueprint for resilience investments addresses critical challenges such as flooding, extreme heat, and infrastructure vulnerability, with a focus on economic and community benefits.

WHY THIS PLAN MATTERS

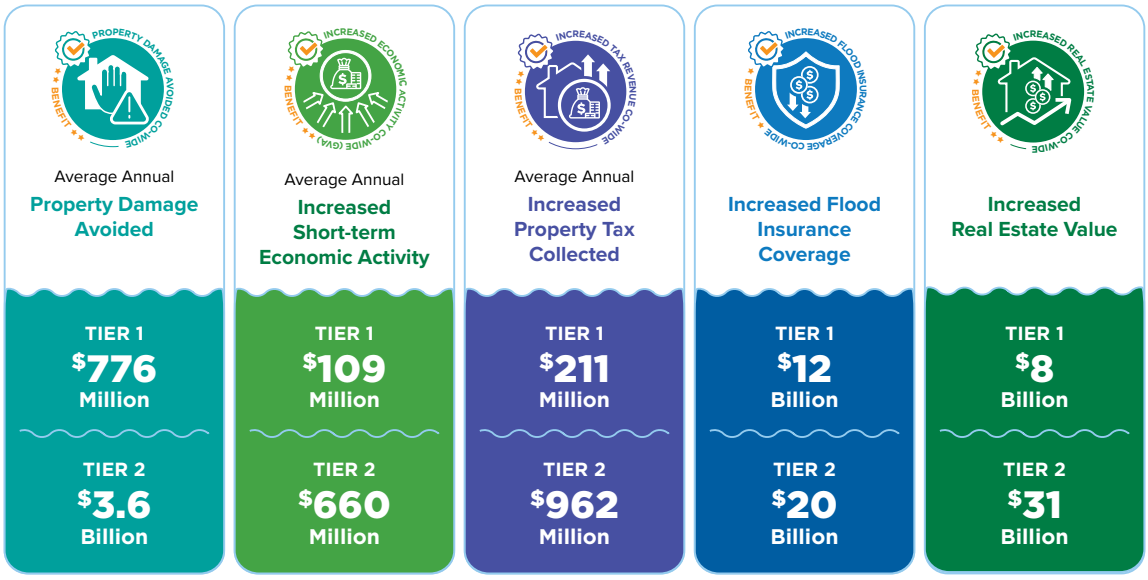
Broward County faces mounting risks from sea level rise, intense rainfall, storm surge, and rising temperatures. As one of the most climate-vulnerable regions in the country, we need collaborative and holistic strategies to protect homes, businesses, and community assets.

HIGHLIGHTS OF THE RESILIENCE PLAN

Flood Modeling Tools: Using advanced modeling, the Plan includes analysis of future flooding under various conditions of rainfall, storm surge, and sea level rise as a basis for identifying areas at increased flood risk and guiding priority adaptation recommendations for land use planning.

Adaptation Strategies
Recommended solutions were identified and tested for their performance in reducing flood risk and losses. Strategies include investments in green infrastructure, additional stormwater storage above and below ground, additional pumps and canal improvements, and bolstering sea walls and similar flood protection barriers.

Summary Of Tier 1 and Tier 2 Benefit Value Estimates



Tier 1 focuses on preparing for a two-foot rise in sea level by 2050. Tier 2 addresses the challenges of a projected 3.3-foot rise in sea levels by 2070.

Economic Outcomes

Five key economic metrics were used to evaluate Plan performance: avoided property damage, short-term economic activity, property tax revenues, flood insurance coverage and pricing, and real estate values. These metrics reveal that, with implementation, the County resilience plan can deliver billions of dollars in economic savings and benefits to Broward County.

BENEFITS AND COSTS

If fully implemented in a scenario with 2.0 feet of sea-level rise (SLR), the Plan is estimated to deliver an average annual benefit of more than $1 billion through avoided property damage, increased short-term economic activity, and property tax revenue. In addition, property values are estimated to be $8 billion higher and flood insurance coverage is expected to be $12 billion larger than in the absence of actions that mitigate flood impacts.

In a 3.3-foot SLR scenario with additional adaptation measures, the average annual benefits are estimated to exceed $5 billion, with property values expected to be $31 billion higher and flood insurance coverage $20 billion larger than under the baseline strategy of no action.

BENEFITS TO THE COMMUNITY:

- Reduced flood risks and property damage to homes, businesses, and public spaces
- Economic stability through fewer disruptions to transportation and businesses
- Public health benefits by enhancing green space and reducing extreme heat
- Environmental preservation to protect biodiversity and promote sustainable land use
- Community resilience by strengthening capacity to respond to and recover from extreme weather and climate impacts

Modeled adaptations from the Resilience Plan:

Delivering this level of resilience is estimated to require a $28 billion investment between now and 2070, of which $9 billion is the estimated public cost with the remaining $19 billion to be realized in the form of private property investments, including redevelopment. Adaptations for both the 2.0' and 3.3' SLR scenarios are deemed economically feasible, as indicated by their net present value, rate of return on investment, and benefit-cost ratio.

As funding strategies for capital investments are explored, other priorities can be facilitated through policies and regulations.

LOOKING AHEAD

Rooted in data, engineering, and community input, the Resilience Plan offers a roadmap for a sustainable and resilient future.

By prioritizing near-term needs and preparing for long-term risks, this plan is more than just a strategy – it is a commitment to strengthening the County's ability to withstand climate impacts for generations to come.

Visit broward.org/resilience to view the condensed plan and executive summary, with a project website to be launched shortly.

A beautiful tree canopy over a Victoria Park roadway. This street could benefit from additional swales for stormwater storage.

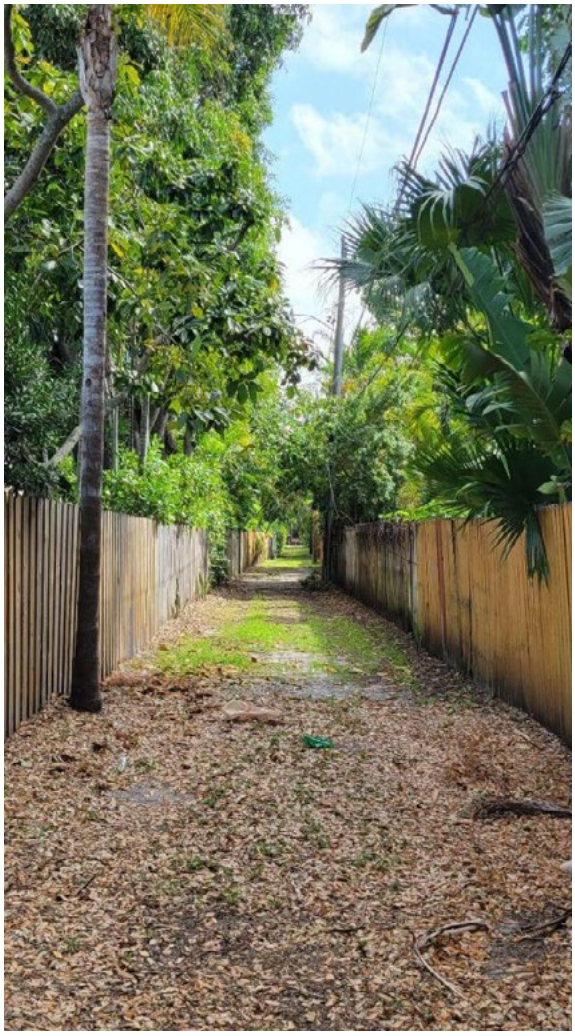
GREEN DREAMS

ADVOCATING FOR MORE NATURE-BASED SOLUTIONS IN BROWARD COUNTY

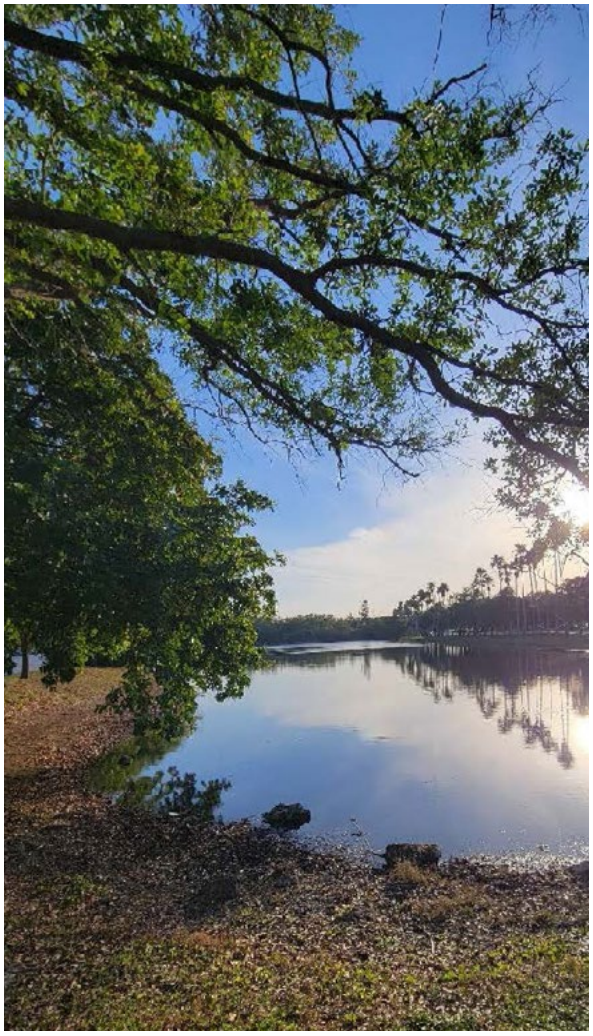
BY DELANI WOOD

Considering the number of roadways, parking lots, and the built-out nature in Broward County, expansion of green space for human enjoyment and natural system benefits remains an ongoing need.

While concrete has been, and will likely remain prominent in our built environment, its widespread use, along with asphalt, has exacerbated some of the most challenging aspects of living in an urban, tropical climate.



An underused alleyway that could be transformed into a multi-use path for walking and biking.



Retention ponds not only alleviate flooding, but also provide habitat for wildlife and offer a pleasant setting to view the sunset.

Buildings, roads, and other "gray" infrastructure tend to absorb and emit heat, contributing significantly to the Urban Heat Island Effect. This phenomenon is when temperatures in urban and suburban areas can soar up to 15°F higher than in nearby undeveloped areas. The difference is palpable – a stroll down a sunbaked city street offers a stark contrast to sitting under the shade of a tree at the park.

In the absence of large open spaces that allow for rainfall infiltration, we use expansive stormwater systems with culverts, drains, and other features to quickly drain and discharge rainfall and runoff from this hardened landscape. However, changing conditions and rapid downpours can sometimes overwhelm these systems. When the water has nowhere to go, it will eventually back up onto the streets and, on occasion, flood our homes and buildings. These disruptions can have massive physical and economic impacts for years following a major storm.

Fortunately, there is increasing awareness within our planning agencies and communities of the need to actively address the challenges posed by flooding

Rain gardens are a form of green infrastructure incorporated into sidewalk design in Washington, DC.

and extreme heat. While implementing effective solutions is a complex undertaking, a clear frontrunner has emerged: incorporating more green infrastructure into urban design.

Green infrastructure, as opposed to concrete, "gray" infrastructure, is the approach of utilizing natural systems – such as plants, soil, and water bodies – within urban development for managing stormwater, reducing extreme heat, aiding coastal protection, and improving natural habitat. Examples are all around us, from tree-lined city streets and swales along roadways to coral reefs and mangrove forests protecting our shorelines. Green infrastructure allows storage, infiltration, and cleansing of stormwater, helps protect against storm surge and coastal erosion, and provides cooling benefits through tree canopy and shade.

Both public and private organizations around the world have been investing in green infrastructure projects for decades, with a growing recognition of significant co-benefits and high returns on investment. Many opportunities exist to integrate green infrastructure into redevelopment

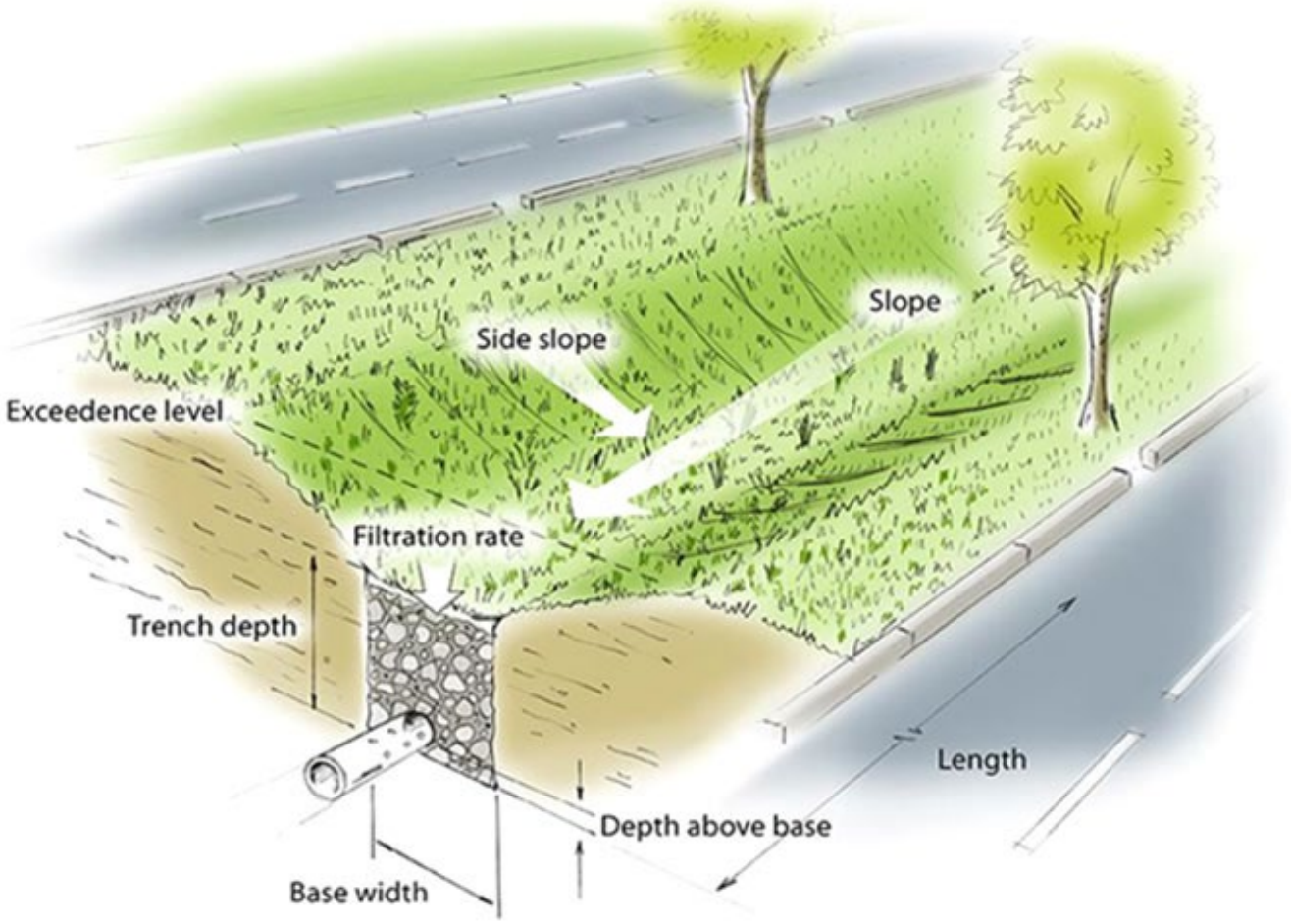
A nice patch of landscaping that provides cooling and storm-water management benefits.

When it rains, water runs off the nearby roadway into this retention pond. When full, water then discharges down the drain. A good example of hybrid green/gray infrastructure.

plans, capital improvement projects, and the revitalization of underutilized land in Broward County. These initiatives would create spaces for rainwater to soak into the ground, provide essential cooling through shade and evapotranspiration, and offer public spaces for people to enjoy.

The Broward County Resilience Plan (see page 6) was created using advanced hydrologic and economic models to inform decision makers on the best path forward for building a more resilient future. While there are a lot of other details to consider, one of the biggest recommendations to come from the plan is the expanded use of green infrastructure. Through this two-year long planning process, we learned that personal preference for more plants in the community is backed by engineering and economics.

Now imagine being able to bike to work along safe and convenient multi-use paths lined with trees and plants, offering protection from both the intense Florida sun and the traffic driving past. Picture abandoned parking lots transformed into vibrant parks with native plants, benches, and open space designed to retain and absorb stormwater during heavy rains.



Green infrastructure can be designed as a bioswale to collect stormwater runoff from roadways and slowly filter it into the ground or connect with municipal stormwater systems.

With alternative materials and design, alleyways could be improved to provide for the added purpose of enhanced stormwater management and infiltration. We need to believe that by working together and investing in green infrastructure systems, we can cultivate an environment that is not only more resilient to changing climate conditions but also provides a truly beautiful place to live.

This eco-corridor crossing the highway through Beijing's Olympic Forest Park is a beautiful example of reimagining what urban areas could provide by way of natural resources.

INSURANCE ASSURANCE

WHAT IS FLOOD INSURANCE AND WHY DO I NEED IT? BROWARD COUNTY'S CARLOS ADORISIO EXPLAINS

Flood insurance is an insurance policy that covers losses caused by flooding.

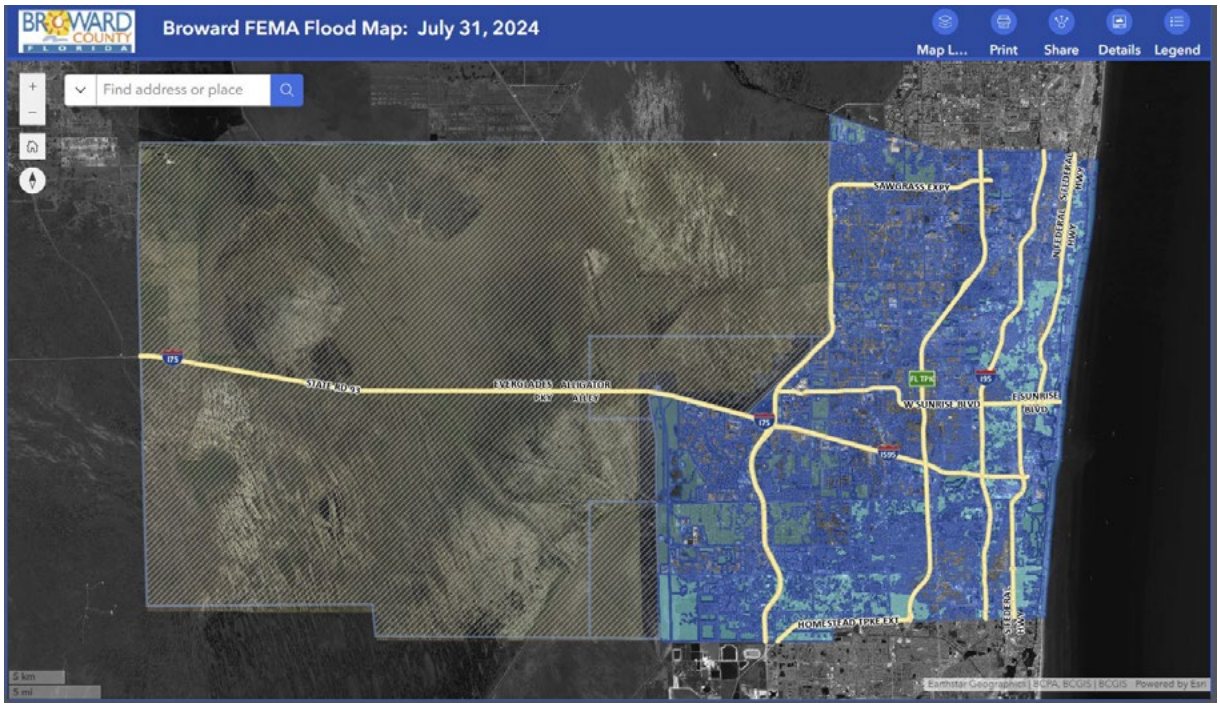
Most homeowners' insurance policies cover water damage caused by a water line break or a sewer line break or clogging, as well as wind-driven rain; however, water damage resulting from a storm surge, overflowing of rivers, canals, lakes, and ponds, or accumulation of rainfall runoff over roads, paved areas, or vegetated areas is only covered by a flood insurance policy.

In the event of a flood, a flood insurance policy covers direct physical losses to your structure and the contents within that structure. Replacing household contents damaged by floods could place a significant financial burden on a homeowner or renter without flood insurance. Just a few inches of water from a flood can cause tens of thousands of dollars in damage. Therefore, all property owners and renters should carefully consider the benefits of flood insurance to protect against significant financial losses from floods.

In Broward County, flooding resulting from prolonged heavy rainfall occurs in rivers and canals that drain inland areas into the Atlantic Ocean when waterway capacities are exceeded. Flooding from prolonged heavy rainfall also occurs in low-lying areas and areas near rivers and canals. Also, flooding resulting from storm surge and wave action from coastal storms (hurricanes) occurs along the coast as well as tidal areas of rivers and canals.

South Florida's rainy season brings more than two-thirds of the region's annual rainfall; however, flooding can occur anytime of the year when large amounts of rain fall over a short period of

For more information visit the following sites: floodsmart.gov and fema.gov/flood-insurance.



The Broward County FEMA Map website provides, for a selected parcel, the 100-year elevation (base flood elevation, or BFE) in the current flood maps and the legacy flood maps from 2014.

time during a single heavy storm, tropical system, or hurricane.

The risk of flooding is quantified in flood maps published by the Federal Emergency Management Agency (FEMA). These flood maps are also known as Flood Insurance Rate Maps (FIRMs). A FEMA flood map shows 3 different areas of flood risk (low, moderate and high).

The high flood risk areas, called Special Flood Hazard Areas (SFHA), usually include a 100-year flood elevation. The best way to understand this 100-year elevation is that in any given year, there is a 1% chance that a flood would reach or exceed that elevation. Also, these areas have a 26% chance of flooding over the life of a 30-year mortgage. The high flood risk areas in a FEMA map include FEMA Flood Zones AE, AH, and VE.

Areas with a moderate or low flood risk designation still have a chance, albeit less than 1%, of flooding in any given year. Moderate or low flood risk areas in a FEMA map include FEMA Flood Zone X (shaded) and FEMA Flood Zone X (unshaded), respectively.

If you want to find your FEMA Flood Zone, you can find the FEMA Flood Maps at **msc.fema.gov**. FEMA Flood Maps for Broward County can be found at: **broward.org/flood**

If a property is in the SFHA (high flood risk) and has a mortgage from a federally regulated or insured lender, flood insurance is required. Recent changes in Florida insurance regulations may result in flood insurance being required even if the property does

not have a mortgage, or even if the property is within the moderate and low flood risk areas.

Regardless of in which flood risk area a property is located, all owners and renters should carefully consider having a flood insurance policy given that about one in three flood insurance claims are from properties located in the moderate and low flood risk areas. Further, rebuilding after a flood can be difficult, and having flood insurance will speed up the recovery phase.

Flood insurance is available to all properties in Broward County, even for properties that have been flooded previously. Depending on the city in which the property is located, a discount of up to 20% in the flood insurance premium may be available. Please note that unless there is a special condition of the mortgage, there normally is a 30-day waiting period between the time flood insurance is purchased and the time coverage is in force.

The risk of flooding for properties in South Florida will increase over time as a result of expected climate change and sea level rise. One way all property owners in Broward County can protect themselves from flooding damages is having a flood insurance policy.

Generative AI image.

WATER MATTERS DAY 2025

Broward County held the 23rd Annual Water Matters Day on Saturday, March 11, 2025 at Tree Tops Park in Davie.

Attendees visited more than 55 interactive educational booths and displays to learn about water conservation techniques, smart irrigation, native landscaping and what role they play in protecting and conserving our water supply. As part of the event, the NatureScape Emerald Awards were presented to select municipalities, schools, community groups, and homeowners that have created and maintained model Florida-friendly landscapes.

PHOTO GALLERY

Tree Giveaway volunteers on setup day.

Anthony Gross, Senior Coordinator, NatureScape Broward

watermatters.broward.org

2025 Infographics Contest high school, middle school, and elementary school winners with their teachers

Above: Commissioner Steve Geller introduces the event.
Below: Mayor Beam Furr welcomes the attendees.

Above: Commissioner Nan Rich.
Below: Commissioners Geller and Rich are joined by Mayor Furr and Town of Davie Councilmember Michelle Whitman.

NatureScapes are environments designed to conserve natural resources and provide valuable habitat for native and migratory wildlife or that had completed exceptional environmental projects.

Residents attending Water Matters Day received free native plants or trees just for learning how to do the right thing. To be eligible, attendees visited at least six of the more than 55 educational exhibits and booths at the park. Our team of volunteers secured a huge range of native trees and shrubs this year, ranging from Barbados Cherry, Mango, Sugar Apple, Jamaican Capertree, Silver Buttonwood as well as Pollinator Support Plants including Coontie and Pineland Croton.

This year's event also featured a Mini BioBlitz and mini-talks from experts in the field.

Above: Miramar High School Students demonstrate how to make a paper planting pot at Main Stage Educational Program. Below, Delani Wood and Himansshu Panwar at the Resilience Unit booth.

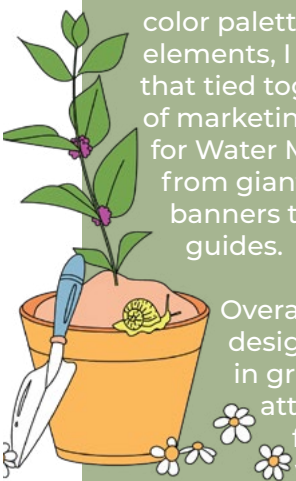
Residents and visitors share what resilience means to them at the Resilience Unit booth during Water Matters Day

DESIGNING WATER MATTERS DAY

ILLUSTRATIVE ARTIST **DYANE OLIVA** EXPLAINS THE INSPIRATION BEHIND THIS YEAR'S WATER MATTERS DAY VISUALS.

"This year's Water Matters Day art sprouted from the theme of "Planting for Our Future." After the Water Conservation team saw the new data showing a county-wide drop in tree canopy coverage in Broward, we felt planting trees was a concept we wanted to emphasize this year.

As a designer, I took this idea and assigned a 'feel' I wanted the event to have- colorful, lively, and utopic- one where trees and planting was central. Some research into past designs brought me to a retro look, in a similar vein to Lisa Frank and Peter Max. Using a limited color palette and simple vector elements, I created a distinct 'look' that tied together the wide range of marketing materials we use for Water Matters Day- anything from giant inflatable arches and banners to digital GIFs and plant guides.



Overall, I feel this years' design was successful in grabbing the public's attention, if not with the fun, retro colors, then with the little Easter eggs and critters I snuck in. The goal as an artist is to spark interest or elicit emotion, so as long as my work got at least one "Cute!" or "Neat!" then I've succeeded."


BROWARD COUNTY FLORIDA
RESILIENT ENVIRONMENT
RESILIENT BROWARD
BROWARD COUNTY FLORIDA Cultural Division
Explore how art, collaboration and community action can strengthen our collective response to a changing climate
COMMUNITY CLIMATE CONVERSATION
SATURDAY, JULY 26TH • 1-4 PM
African-American Research Library and Cultural Center

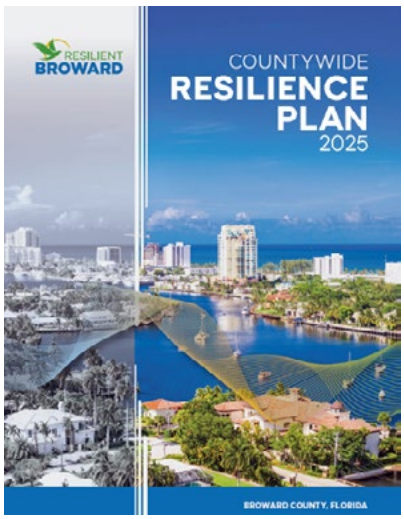
RESILIENT BROWARD

BROWARD COUNTY LEADERS DISCUSS $28 BILLION PLAN TO TACKLE CLIMATE THREATS

***Resilient Broward: Economic Strategies and Solutions for our Future* was an event that provided a discussion on the $28 billion plan to harden our infrastructure, addressing rising seas, heavier rainfall, warmer temperatures, and other pressing climate-related issues.**

ARIELLE PERRY of the Center for Environmental Studies (CES) attended the event for *The Invading Sea*.

As climate change drives rising sea levels, heavier rainfall and other infrastructure challenges, Broward County leaders are exploring strategies to address these impacts.



The Broward County Risk Assessment and Resilience Plan

At the *"Resilient Broward: Economic Strategies and Solutions for our Future"* event on Feb. 26 at the Broward Center for the Performing Arts in Fort Lauderdale, County leaders convened with the business community to discuss climate challenges and solutions, including the county's $28 billion plan to tackle climate threats.

"We are at ground zero for the effects of climate change, and I think we want to make sure that we're not the cause of our own demise," said Broward County Mayor Beam Furr.

The Broward County Risk Assessment and Resilience Plan is the culmination of a two-year effort to strengthen community resilience to climate impacts in the county.

Broward County Chief Resilience Officer, Dr. Jennifer Jurado, discussed expected benefits of investing in flood mitigation infrastructure, such as reduced insurance rates and increased coverage, avoided property damages and increased

DR. JENNIFER JURADO, Chief Resilience Officer, Broward County.

LAURIE JENNINGS President, Laurie Jennings LIVE, was the event's moderator.

State Representative CHIP LAMARCA, 100th House District

Broward County Mayor BEAM FURR.

local government revenue from property taxes.

"The plan is realistic, it's achievable, it's effective and it's responsive to the requests that were made of the same community here today, wanting to see something solid that could serve as that blueprint for moving forward," Dr. Jurado said.

The plan does not identify funding sources, but Dr. Jurado said there are opportunities for public funding and collaboration with the private sector. The event brought together leaders in the business community to discuss how they can support these efforts.

Panelists spoke about topics ranging from climate tech and innovation to climate finance and insurance resilience.

"What we are doing is working across South Florida, across this region, on commercializing solutions for our changing relationship with water and extreme weather, and what is going to come out of that are good jobs, a more resilient economy and stronger national security," said Dr. Galen Treuer, climate tech and economic innovation manager for Miami-Dade County.

Left to right: JAMES DONNELLY, Founder and Chairman of Crown Residential; JOSEPH KARL, Chair, Economic Resilience Council; LAURIE JENNINGS, Broadcaster and event moderator; Dr. JENNIFER JURADO, Chief Resilience Officer, Broward County; ANITA BYER, President, Setnor Byer Insurance & Risk; KATHERINE O'FALLON Executive Director, Marine Research Hub; RON DREW, Executive Vice President, Greater Fort Lauderdale Alliance; KAREEN BOUTROS, Executive Director, Broward Workshop, ALEX MOREIRA, President and Founder, Aska Impact.

The discussion also included a panel on climate solutions featuring 1Print and KindDesigns, both climate tech start-ups that are working on creating 3D-printed seawalls. When discussing innovative solutions to address sea-level rise, Marine Research Hub of South Florida Executive Director Katherine O'Fallon expressed optimism for the future. "The solutions are there," she said. "We just have to make sure more people know about that."

"I think that's one of the things that as part of also educating our community, that this is a huge opportunity for these solutions, for jobs and taking care of our backyard," O'Fallon added.

Arielle Perry is a master's student in the Environmental Science Program at Florida Atlantic University and is a graduate research assistant at FAU's Center for Environmental Studies. The center manages The Invading Sea.
theinvadingsea.com

RESILIENCE FINANCE KNOWLEDGE EXCHANGE

Broward County welcomed leaders from across the globe for a Resilience Finance Convening held March 25-27, 2025, in partnership with the Resilient Cities Network. The event brought together city officials, finance experts, and private sector partners to develop strategies for unlocking large-scale capital to fund local climate resilience efforts.

The event focused on capital planning, risk reduction, and innovative financing models, with the aim to empower communities with the tools needed to better prepare for and respond to climate-related challenges.

In addition to Broward County, representatives from the cities of Miami Beach, City of Miami, New York, San Francisco, Oakland (CA), Cape Town (South Africa), Miami-Dade County, and Hollywood (FL), joined resilience finance leaders from Howden, Arup, and Tokio Marine to share best practices and explore new approaches to funding

Broward County Chief Resilience Officer Dr. Jennifer Jurado addresses attendees.


Michael Ruiz, Assistant County Administrator, Broward County
Below: Patricia Gomez, Special Advisor Energy and Resilience Miami-Dade County.

resilient infrastructure. Key themes included advancing a portfolio-based approach to resilience investments, strengthening governance frameworks to enhance financial readiness, and utilizing risk-informed investment tools to guide strategic decisions.

The convening also emphasized the importance of the City Resilience Framework 2024, highlighting how it can shape informed and targeted urban investment strategies. Participants examined common barriers to resilience financing, including legal complexities, funding gaps, and a shortage of

Dan Lindblade, President & CEO
Greater Fort Lauderdale Chamber of Commerce.

Beam Furr, Mayor, Broward County.

Attendee photo, R-Cities: Resilience Finance Convening 2025.

Lauren Sorkin, Executive Director, Resilient Cities Network

Mayor Beam Furr in discussion.

bankable projects and worked through actionable solutions. Discussions explored the potential of public-private partnerships, creative tools like tax increment financing, and the alignment of public sector goals with private sector investment opportunities.

Through the event, a clear message emerged: strong governance, compelling economic cases, and an overarching long-term financial plan are essential to attracting sustained investment in climate resilience.

As the climate risks intensify, Broward County's convening served as a timely and urgent call for global collaboration, innovation and financial agility to build more resilient communities.

BC'S EV STRATEGIES

Broward County is taking a major step toward a cleaner, more resilient future with the completion of its Electric Vehicle Charging Infrastructure (EVCI) Strategy.

This planning initiative assesses the County's existing charging network using a combination of data and community discussion to identify areas where projected future electric vehicle (EV) charging needs will outpace existing charging station availability.

To address this gap between current infrastructure and future need, the EVCI Strategy considers key factors such as EV adoption trends, existing charger utilization, and site-specific conditions – including 100-year flood risk – to recommend priority locations for new charging stations. These sites are focused on multifamily housing, large employment centers, and public properties like city halls and parks, that allow safe and convenient access to EV chargers for residents and visitors who may be unable to charge at home.

Broward County has an EV fleet of over 153 vehicles, with a further 26 on order. Over $11M is budgeted in general capital funding for the installation of electric service and charging infrastructure at 53 County facilities.

The Strategy not only gives insight on site locations but also provides awareness to other considerations when investing in EVCI. The project team analyzed changing policies that may affect EV adoption and provided funding opportunities and financial incentives to promote cost-effective implementation. Safety and resilience remain top priorities, with recommendations to ensure all EVCI can withstand severe weather events, mitigate and prepare for fire risks, and integrate emerging future technologies.

Community engagement has been a critical part of the planning process, helping to align data-driven insights with local needs. With this strategy, Broward County is paving the way for a more accessible, sustainable, and future-ready EV network.

CARBON CONSCIOUS

RTR HOLDINGS & SERVICES

The Resilience Unit has been working with the private sector to help achieve county-wide sustainability goals. One of these initiatives is the Carbon Conscious Business program.

Broward business owners can access a variety of resources and receive personal advising to help reduce their environmental impact and identify cost savings in their operations.

In this newsletter, we will be highlighting one of the Broward Carbon Conscious Businesses, RTR Holdings and Services, run by Darius Antalan.

We first met Darius at the Oakland Park Business Partners meeting at Maggie's Favorite coffee shop. He was very excited to become involved in the Carbon Conscious Business program and share some of the ways he is working to reduce energy use and increase resilience in his operations.

Read more for the inside scoop and to maybe gain some inspiration for your own business operations.

Can you tell us a little about yourself and your business in Broward County?

Ever since I was about ten years old, I knew that I had no desire for material things like a big house or a new car. Instead, I was much more interested in sustainability and taking care of the planet. I moved my business to Broward County from Tuscaloosa, Alabama, just before the 2020 COVID pandemic.

Since then, RTR has continued to expand operations to include residential real estate (Thee Quad Resorts) and dog daycare (Waggin' Rears). I'm using this business opportunity not only to reduce environmental impact but also maintain affordable rates for services in my community.

On-site greenhouse allows access to fresh fruits and vegetables

What investments or changes have you made to make your business more sustainable?

In 2021, we began installing EnergyStar appliances, water heaters, and smart thermostats throughout the entire complex to save energy and increase efficiency. In 2023, we went outside to replace the landscape lighting with motion sensor and solar capabilities to take maximum advantage of our precious Florida sun.

Every building is equipped with updated weather stripping, reusable grocery bags, even bicycles and electric scooters for guests to commute in the area, avoiding gas emissions and reducing waste.

We also provide discounts to residents and visitors who pick up trash along the beach during their stay. The next great challenge for 2025 is to continue growing our greenhouse garden and compost

Bikes and electric scooters are available for rent, avoiding gas emissions from local transportation

efforts. In the future, we would like to invest in hurricane rated windows and doors, upgrade to high efficiency HVAC systems, and install solar roof panels and EV charging stations.

How has the Carbon Calculator tool helped inform your business decisions?

The Carbon Calculator tool helped by shining a blaring light on where I can increase efforts to be more carbon conscious in my operations by being more efficient and reducing waste. The tool also gave me great insights into the aspects of my business that can enhance community resilience such as offering guest bus passes to ride public transit rather than driving.

Is there anything else you would like to share that could help make Broward a more resilient community?

I think economic discussions across Broward should deeply integrate carbon consciousness; not only how to lead in its efforts but to also educate for the future. A much greater impact can be made on our environment if we stand with each other and work to support the next generation.

This year I plan on starting an organization with the mission of putting resilience in the hands of children, giving them the tools to be economically self-sustainable while teaching entrepreneurial skills for the real world.

UPSTATE UPDATE

BY SARAH PARISEAU

The Florida Legislature officially launched its 2025 Legislative Session on March 4, with several resilience-related bills up for discussion.

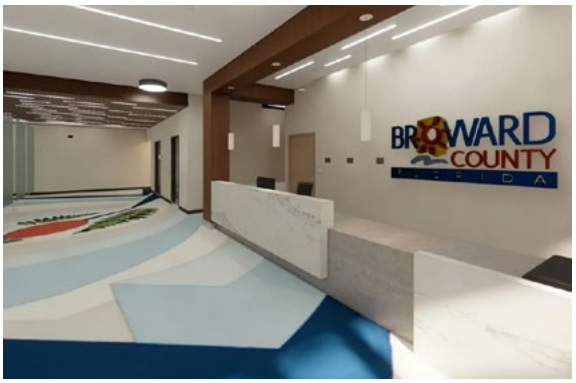
NATURE-BASED SOLUTIONS FOR COASTAL RESILIENCE

Senate Bill 50, Nature-Based Methods for Improving Coastal Resilience, promotes the integration of nature-based infrastructure to protect Florida's vulnerable coastlines.

The bill directs the Florida Flood Hub for Applied Research and Innovation to develop design guidelines that blend green and gray infrastructure—such as living shorelines, mangroves, and seawalls—to reduce risks from flooding and erosion.

The Department of Environmental Protection would be responsible for adopting rules to implement these guidelines.
Nature-based solutions like living shorelines use native vegetation and natural materials to absorb storm surge, and mitigate flooding—providing both ecological and protective benefits.

On May 3, SB 50 was indefinitely postponed and withdrawn from consideration.



The Property Appraiser and Value Adjustment Board (VAB) Building Renovation GMP project achieved LEED Silver certification

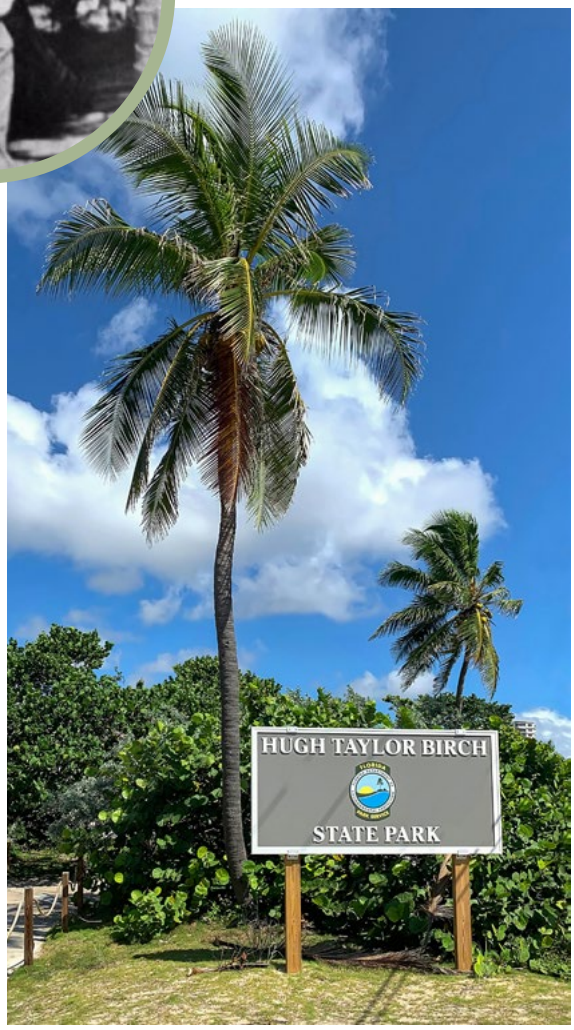
RESILIENT BUILDINGS TAX CREDIT

Senate Bill 62, Resilient Building Tax Credit, proposes a tax credit for owners of buildings that achieve specific Leadership in Energy and Environmental Design (LEED) certifications. The goal is to incentivize sustainable construction that enhances building resilience to environmental stressors such as extreme heat and storms.

Eligible property owners would apply through the Department of Environmental Protection to receive the credit. LEED-certified buildings use less energy and water, reduce waste, utilize renewable energy sources, and preserve natural habitat—all while lowering utility costs for occupants.

On May 3, SB 62 was indefinitely postponed and withdrawn from consideration.

Inset: Hugh Taylor Birch



Hugh Taylor Birch State Park is Fort Lauderdale's own "Central Park," complete with gopher tortoises and boat access from the intracoastal waterway. It's easy to see why Hugh Taylor Birch wanted to preserve his estate for future generations to enjoy — it's an oasis perfect for relaxation and exercise.

PROTECTING FLORIDA'S STATE PARKS

Senate Bill 80, State Land Management, is new legislation that seeks to preserve the integrity of Florida's state parks by prohibiting development of commercial amenities like golf courses, hotels and pickleball courts within park boundaries. The Florida State Park Services contains up to 175 state parks, trails and historic sites spanning more than 815,000 acres and includes 101 miles of sandy beach. The bill prioritizes conservation and passive recreation, such as swimming, hiking, birding and biking, helping to ensure that these natural spaces remain protected for future generations.

It has gained bipartisan support and is moving forward in the legislative process.

OPPORTUNITIES AND UPDATES

L to R: Adam Roberti and eco-artist Xavier Cortada of the Cortada Foundation with Broward County Mayor Beam Furr, Cultural Division Director Phillip Dunlap, and Broward County Chief Resilience Officer Dr. Jennifer Jurado.

ALL FOR 4!

In January, Broward County Mayor Beam Furr joined eco-artist Xavier Cortada, Broward County's Cultural Division and Resilient Environment Department to unveil an aluminum sculpture featuring the number 4, representing how many feet the Broward County Governmental Center East sits above sea level.

View the full unveiling here: *vimeo.com/1049033743*

TILLING IN ACTION: Coordinated closely with the Broward County Sea Turtle Conservation Program, beach tilling is required by State permits to loosen the sand for sea turtle nesting. Without tilling, the beach could be too compact and sea turtles may have trouble digging their nests.

Celebrating 20 years of certification

NatureScape BROWARD

NWF community wildlife habitat™

CELEBRATING 20 YEARS AS AN ACTIVE COMMUNITY HABITAT

Broward County became one of the first two counties in the nation to be recognized as Community Wildlife Habitats in 2005.

Broward is the only county in the nation to have all their Public Schools campuses certified as National Wildlife Federation Schoolyard Habitats. Through NatureScape's continued efforts with municipal partners and residents, we have almost 6,000 NWF certified properties that are NatureScapes.

NatureScapes are focused on water conservation, native plantings, creating wildlife habitats, and reducing fertilizer and pesticide use.

Visit *broward.org/naturescape*

MEET THE TEAM

HIMANSHHU PANWAR

Hello! I recently joined the Resilient Environment team, where I hope to create positive change through impactful advocacy and planning. My motivation to join this field comes from my experiences growing up in Delhi, a city facing significant environmental challenges. I soon realized that solving larger environmental problems required solutions at a broader scale—like cities and entire regions. This insight inspired me to pursue a Master's degree in Environmental Planning in Delhi.

This led me to Columbia University, where I completed my second Master's degree in Sustainability Management. Throughout this journey, I always knew I wanted to work in the public sector, where my efforts could have a direct and meaningful impact on people's lives. In the U.S., I started my professional career with the City of Charlotte, focusing on electric vehicle infrastructure. Now, here in Broward County, I'm working on strategies to manage and reduce impacts from extreme heat. If my work helps reduce heat-related illnesses, I'll feel truly fulfilled.

Outside of work, I love staying active by playing volleyball, practicing yoga, and going hiking—activities that help me stay balanced, both physically and mentally. While I haven't yet achieved everything I hope to accomplish, my curiosity and constant desire to learn keep me excited and motivated every day.

STAY IN TOUCH

@browardresilience
@browardresilience
resilience@broward.org
@browardresilience
Phone : 954-519-6613
115 S. Andrews Ave., Room 329A, Fort Lauderdale, Florida 33301

Funding for the Resilience Newsletter is provided in part by the Broward County Board of County Commissioners as recommended by the Resilient Environment Department. An equal opportunity employer and provider of services. 50 copies of this public document were promulgated at a gross cost of $95.00 and $1.980 per copy to promote the Broward County Resilient Environment Department.

BROWARD COUNTY FLORIDA | RESILIENT ENVIRONMENT