SUSTAINABILITY UPDATE

Broward Climate Change Task Force November 2, 2023

#SustainableBroward

Agenda

Update – Programs & Projects

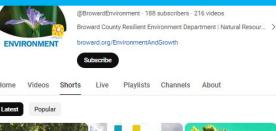
Formulating 2025 Climate Action Plan

CCAP ACTION 107. Continue local water conservation.

Continue the coordination and delivery of local water conservation programs and activities.



As of July 1, 2023, **Broward Water Partnership**' Conservation Pay\$ Toilet Rebate increased to \$125/toilet for replacement of toilets using 1.6 gpf or more





A Game of Inches A Sprinkle of Sa 112 views 83 views

 Wains History in July
 A Tale of Two Stars #shorts
 Savings Under the Sun groups

NatureScape Irrigation Services Team has been creating monthly YouTube Shorts on outdoor water conservation and Residential Irrigation Rebate Program (RIRP)



NEWSLETTER

NatureScape August Quarterly Workshop Meeting We had a great meeting and turnout. Thank you all for attending.



Anthony Gross, Dr. Patrick Griffin and the "13th" Florida native palm Sabal Palmetto "lisa" at <u>Montgomery Botanical Center</u>

Special Thanks to <u>Dr. Mica McMillan</u> University of Florida Palm Specialist. She provided useful educational information on Palm Nutrition and a great lunch!



NatureScape Broward held its Quarterly Workshop at Fern Forest to close to 80 attendees on the topics of Invasive and Native Ferns, and Native Palms



The **BCPS/Broward County** Environmental Partnership Agreement, Contract Yr 1 served nearly 10,000 BCPS students, staff, and faculty CCAP ACTION 20. Educate the community on climate change. Develop and deploy curricula and programs for public schools. CCAP ACTION 37. Increase community connection to nature.

Provide nature-based educational experiences and promote physical and emotional well-being.



CCAP ACTION 93. Expand renewable energy.

Promote solar adoption in the community, including the development of additional financing mechanisms; continue support for the Solar Co-op program to reduce the energy burden for residents.



SUSTAINABLE ENERGY AND WATER USE

Nearly half of Broward County's Communitywide Greenhouse Gas Emissions come from electricity use by residential, commercial, and industrial users. This electricity primarily comes from the burning of fossil fuels like natural gas and coal. Producing electricity from cleaner sources like solar and using electricity more efficiently reduces both the amount of fuel needed to generate electricity and the amount of greenhouse gases and other air pollution emitted as a result. Reducing electricity use also helps reduce water use as fossil-fuel electricity generation and water systems are inextricably linked, each other being dependent on the other to operate. Using less energy and water also helps you lower your utility bills.

Incentives and Financing Available for Energy and Water Efficiency Upgrades

FPL offers residents and businesses no-cost energy usage evaluations and recommendations to help get you started on making your building more energy efficient. They also offer residential and commercial customers rebates for energy saving upgrades. Property Assessed Clean Energy (PACE) program is a financing option for energy efficiency and conservation projects available to both homeowners and business owners in Broward County. Qualifying improvements include rooftop solar panels, solar water heater, energy efficient air conditioning unit, cool roof, impact windows, insulation, and more. Learn more about PACE financing.

The non-profit Solar and Energy Loan Fund (SELF) is an independent, non-profit, community-based lending organization focused on financing home renovations that promote energy efficiency, clean energy alternatives, storm protection, water conservation, and disability products. Learn more about SELF financing.

The Broward Water Partnership's Conservation Pays Program offers toilet rebates for qualifying residents, businesses and nonprofits. BWP also offers eligible residents water-efficient showerheads and low-flow faucet aerators. Commercial kitchens can get pre-rinse spray valves. Learn more about Broward's Water Conservation Programs



or call 813.213.3856

CCAP ACTION 93. Expand renewable energy.

Promote solar adoption in the community, including the development of additional financing mechanisms.



We partnered with Solar United Neighbors for the 2023 Broward Solar Co-op by sharing information on the Sustainability Stewards of Broward newsletter, on the Broward.org/sustainability website, reserving rooms at libraries for in-person Solar 101's, and on social media platforms.

Out of 11 firms, Go Solar Power was selected as the co-op solar installer.

To date, there are 89-members in the 2023 Broward Solar Co-op.

The co-op is open to new members until January 31, 2024.

CCAP ACTION 4. Maintain climate, energy & sustainability programming.

Coordinate resilience and sustainability initiatives across County agencies and operations

CCAP ACTION 91. Continue to reduce the energy consumption of County Operations. Pursue energy efficiency opportunities.



- Government Operations Workgroup
 - Climate Action Plan 2020 Aug 2023
 - Brainstorm CPRG Implementation Grants October 2023
 - LEED for Cities Certification
 - Gathering data for the final application (November 15th deadline)

CCAP ACTION 96. Reduce the amount of waste going to landfills. CCAP ACTION 35. Implement on-site organics (food waste and yard waste) collection...

Engage community volunteers to educate public/students on proper waste disposal.



Virtual Workshop Food Waste Prevention

Speakers: Emily Grant, Senior Program Manager, MEANS Database Xavier De Roos, <u>Renuable</u> Dustin DuBois, Filthy Organics

CCAP ACTION 38. Collaborate on air quality monitoring, education and health risk outreach.

Expand and improve air quality monitoring and public information programs. Adopt standardized air health risk communications strategies. Improve coordination among governmental agencies at all levels and non-governmental health care organizations. Educate the community on regulations and engage them in citizen science projects. Expand access to air quality data and reporting to the public. Increase air quality monitoring of industrial, utility and landfill applications.



Air Quality Colors green It's a great day to be active outside Ut's a good day to be active outside. It's OK to go outside and be active for recess or PE class. For longer activities.

and trigger attacks. **Take it easier.** Take some breaks. Do less intense activities like walking instead of running when it's an orange day.

Centers for Disease Control and Prevention recommends 60 minutes

Watch for symptoms! Coughing or shortness of breath are

or more physical activity each day.

signs to take it easier. Air pollution

can make asthma symptoms worse

Go for 60!

Plan ahead for ozone. There is less ozone in the morning, so do intense activities in the morning on ozone air pollution days.

Around Your School...

- Ask bus and carpool drivers to turn off their engines if parked for more than 30 seconds.
- Play or exercise as far as possible from busy roads.
- Check the local Air Quality Index daily at *airnow.gov* or by downloading the EPA AIRNow mobile app in the app store.



Note: There are three additional colors - red, purple, and marcon - used in EPXA AP Quality Index. They indicate unhealthy (red), rev unneatury purples, and hazardou; marcon) air quality. They are not included in the Broward County AQI flag program because these conditions are extremely rate in South Florida. In the event we do experience unhealthy or worse air quality, health advisories will be issued from the Air Quality Program in the local media.



Getting ready for our next #CitizenScience project involving air quality tracking w/PurpleAir sensors courtesy of @BrowardEnv as means to learn to represent and analyze data in real world context.

Monika Moorma

HCitizenScienceAmbientAir MonitoringPilotProgram

Tweet your reply
 Reply
 Kristyn Palazzolo (sl - Sep 29

Replying to @MrsMoorman1 @BrowardEnv and @gardenerdoodes This looks so cool! 💝 🖓 tl 🗘 2 t

El modelo de la NASA demuestra la mayor concentración de humo actualmente en tierra que estaría pasando esta tarde.

@AIRNow

related issues.

view it here

Reduzcan su tiempo afuera y sus actividades al aire libre mientras el humo pase.

Broward Environment

forecast is currently Unhealthy

There is a mass of Black Carbon over #florida

which is indicative of smoke. This is affecting

Broward County's air quality and the air quality

Check the air quality forecast at airnow.gov.

The NASA model shows the heaviest mass

currently onshore and passing by this evening.

Please limit your time outside until this air mass has passed through the area, especially if

you suffer from respiratory or other health

If you're interested in checking out the model

https://fluid.nccs.nasa.gov/wxmaps/chem2d/

SP: La calidad del aire en el condado de Broward

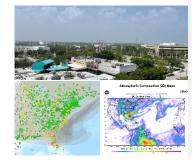
está siendo afectado por humo. El pronóstico de

Encuentre el pronóstico de la calidad de aire

la calidad del aire No es Saludable. 🔴

and select Aerosols BC Sfc Mass.

Si te interesa ver el modelo de la NASA, véalo aquí https://fluid.nccs.nasa.gov/wxmaps/chem2d/ y seleccione Aerosols BC Sfc Mass.#airqualityt#CleanAirBrowardrd



1:31 ALL LTE AirNov Havana CUBA Merida YUCATAN IAMAICA AQI Legend Refreshed At C Oct-03-2023 1:31 PM EMALA Leaflet | Powered by Esri | Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, A. 0 3 Home Places Map Smoke

CCAP ACTION 17.– Set a plastic waste reduction goal.

CCAP ACTION 98, 99, and 106 – Increase natural area ecosystem resilience, support ongoing coral reef restoration and resilience activities, and public outreach and education on the status of coral reefs, and the effects of climate change and sea-level rise.



Nearly 2,000 volunteers across 13 locations within Broward County teamed up to remove an astonishing 4,300 pounds of debris from our beaches. The data gathered from this event will be compiled and utilized to educate and inform policy and legislation at local, state, country, and international levels





CCAP Actions 9 & 13 - Address mitigation and adaptation policies in the Land Use Plan and implement and promote Dark Skies outdoor lighting model ordinance and Element: Natural Systems, **CCAP Action 99 & 103** – Support ongoing coral reef restoration and resilience activities; Assess non-point-source pollution transport and fate across the County to the ocean. **CCAP Action 106** – Public outreach and education on the status of coral reefs, and the effects of climate change and sea-level rise.

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Broward Environment

Today is the last #turtletuesday of the 2023 sea turtle nesting season, but don't be sad! This year, sea turtles in Broward County broke local records!

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Not only was 2023 a record-breaking year for the total number of nests laid, but this season was also the first time in our program's history that record-breaking numbers were recorded for all three species that nest in Broward County!

City of Deerfield Beach, Florida - Government City of Pompano Beach Town of Lauderdale By The Sea City of Fort Lauderdale Dania Beach City of Hollywood, Florida Government City of Hallandale Beach Government CBS Miami WLRN Public Radio and Television FOX Weather NBC 6



🖒 Like 🖓 Comment 🔗 Share

Broward Environment Just now

This Marine Monday, we're highlighting Broward County's divers in their efforts to protect our precious coral reefs and ensure safe boating practices. These dedicated divers are going below and beyond by conducting thorough mooring buoy inspections.

Mooring buoys play a crucial role in sustainable boating practices, reducing the need for anchors that can unintentionally harm delicate corals. By going the extra fathom with their close attention to detail, these divers diligently check the mooring systems for any signs of wear or corrosion, ensuring they're in top-notch condition.

Check out our website for more info on these mooring buoys and their locations throughout the county! https://ow.ly/S6Jm500V6gw

Let's join their efforts by spreading awareness about responsible boating practices and the importance of protecting our coral reefs. Together, we can protect our stunning coral reefs and ensure future generations can experience their awe-inspiring beauty.

Video Courtesy: Mark Hartman

Marine Environmental Education Center at the Carpenter House City of Deerfield Beach, Florida - Government City of Pompano Beach Discover Lauderdale By The Sea City of Fort Lauderdale City of Hollywood, Florida Government City of Hallandale Beach Government Florida State Parks



Broward Environment

Marine Monday Update 🔃 Good news from Broward County's coral reefs! Unlike the Florida Keys, which has been experiencing significant thermal stress and bleaching, our reefs have, so far, been faring better. Our marine team noted only a few species and colonies have shown signs of bleaching so far.

If you didn't know, coral bleaching occurs when corals expel the symbiotic algae living in their tissues due to stressful conditions, such as increased ocean temperatures. Without these colorful algae, corals turn white and become more vulnerable to disease and death. It's a concerning phenomenon impacting coral ecosystems worldwide. Let's continue to monitor and protect our precious reefs!

Photo Courtesy: Kirk Kilfoyle

Marine Environmental Education Center at the Carpenter House City of Deerfield Beach, Florida - Government City of Pompano Beach Discover Lauderdale By The Sea City of Fort Lauderdale Florida State Parks City of Hollywood, Florida Government City of Hallandale Beach Government MyFWC Florida Fish and Wildlife Nova Southeastern University



Broward County ... @Browar... • Just now In case you missed it, our sea turtle program was featured on @WPLGLocal10 last week! Our turtle team joined @LouisWPLG on the beach to talk turtles. Read or watch the story online: https://ow.ly/HurR50PBqpT #turtletuesday



Water Quality

The EML continues to support the Florida Department of Environmental Protection and Southeast Florida Coral Reef Initiative by conducting monthly analyses of nutrients and other analytes from 115 sites in 4 counties (Broward, Dade, Monroe and Palm Beach) to identify the impact of land-based sources of pollution to coral reefs and marine ecosystem.

Mooring Buoys

- Developed a series of educational videos with the Office of Public Communications on the importance of the Mooring Buoy Program and the proper use of mooring buoys within the boating community.
- Inspected and maintained, monthly, all 122 offshore mooring buoys located on Florida's coral reef.

Sea Turtle Nesting Season

- Performed lighting site visits for technical assistance with local businesses, residential, or municipal entities.
- Presented at Outreach events in support of the County's sea turtle conservation program
- Facilitated meetings with municipalities regarding sea turtle nesting and/or lighting issues

CCAP Action 79 – maintain beaches, **CCAP Actions 20 & 29** – Educate the community on climate change and engage and educate private sector stakeholders and community members about resilience strategies for the built, natural and social environment, and **CCAP Actions 98, 100, 102, and 106** – Increase natural area ecosystem resilience, prioritize areas for living shorelines, increase the availability of native regional plants, and public outreach and education on the status of coral reefs, and the effects of climate change and sea-level rise.





Dune Grant Program

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- Received nine (9) applications for the County's dune grant program.
- Finalized and issued eight (8) grants to local municipalities and private property owners.
- Four (4) native dune plantings or invasive removal projects started and completed.
- Provided information and/or presentation interested potential applicants.





Con this Marine Monday we've got exciting news! The deployment of the SEAHIVE™ modules at Wahoo Bay (beside the Hillsboro Inlet) is now complete! These innovative concrete structures, designed with the University of Miami (UM), are an attempt to make living shorelines more practical in higher energy environments, while supporting higher biodiversity and more organisms than natural shorelines. Let's celebrate this remarkable step towards protecting our oceans and preserving their beauty for generations to come! C

Image: Wahoo Bay

City of Pompano Beach MyFWC Florida Fish and Wildlife



🖒 Like 🖓 Comment 🔗 Share

Living Shorelines

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Continue partnership and collaboration with state agencies, local municipalities, academia, schools, and NGOs in the design and construction of the Wahoo Bay Seahive living shoreline project and the New River Middle School living shoreline project.



Manatee Season November 15th – March 31st Formulating the 2025 Climate Action Plan



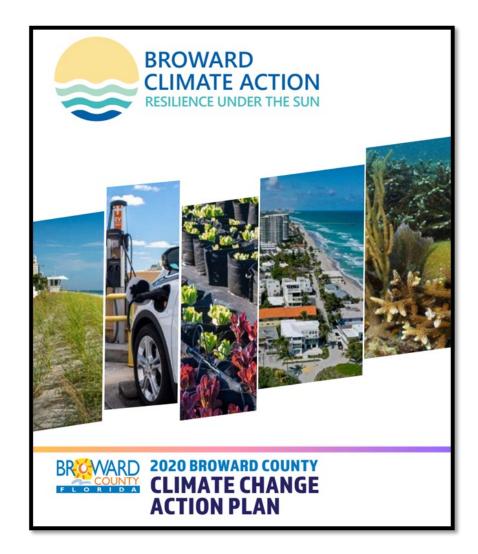








Water Resources



Formulating the 2025 Climate Action Plan

- Timeline
 - Development stage December 2023 – April 2024
 - Presentation /Draft of 2024
 CCAP to the CCTF May 2024
 - Final to CCTF August 2024
 - Board Action November /December 2024

Thank you

Monica Pognon - Director Natural Resources Division 954-519-1476 mpognon@broward.org www.Broward.org/naturalresources