



THE WILMINGTON CURRENT

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City Manager to Retire

And more! ■

WCITY OF
WILMINGTON
NORTH CAROLINA

**PUBLIC INFORMATION REPORT
SPRING 2021**

BOND RATINGS

Wilmington Receives Top Credit Ratings

The three major credit reporting agencies recently released bond ratings for the City of Wilmington, awarding the city the highest available ratings once again.

Standard & Poor's (S&P), Fitch, and Moody's assigned the city AAA rating for General Obligation Bonds (GOB). S&P and Fitch assigned AA+ rating for Limited Obligation Bonds (LOB). Moody's assigned the city AA1 for LOB.

"The rating reflects our view of Wilmington's strong tax base, and seasoned management team that maintains a range of comprehensive formalized financial policies and practices. We believe these factors have helped contribute historically to the maintenance of balanced financial operations and very strong fund balance reserves," S&P wrote of its decision.

Like most city governments, Wilmington issues bonds to pay for large projects such as the 2014 Transportation Bond and the 2016 Parks Bond. The projects are paid back over time. The better bond ratings result in lower interest rates and, in turn, lower borrowing costs.

The credit rating agencies determine their ratings based on several factors, including their view of the city's management of public dollars, the city's overall financial health and stability, and the city's amount of savings. ■

FINANCE SAVINGS

City Saves \$1.6 Million

Wilmington City Council recently approved financing capital projects and refinancing existing debt, which yields an estimated savings of \$1.6 million dollars for the city and its taxpayers. The savings come from refinancing \$21 million in Limited Obligation Bonds and a refunding of \$47.7 million in General Obligation Bonds. ■

EMPLOYEE SPOTLIGHT



Polluted stormwater runoff poses a major threat to the health of the city's water bodies. Compliance Officers play a vital role in addressing a wide variety of stormwater pollution violations in the community such as blowing yard waste and debris into storm drains and ditches, failing to clean up pet waste, and detecting and eliminating illicit discharges.

Public Services Compliance Officers are the city's front-line defense for keeping our city clean and preventing pollution. They work to keep trash off the city's streets and sidewalks by enforcing recycling and trash ordinances and upholding stormwater regulations to protect our creeks and waterways. ■

Did You Know?

An illicit discharge is anything other than rainwater that enters the stormwater system.

Illicit discharges include:

- Pouring oil and chemicals into storm drains
- Construction site issues
- Restaurant cooking grease spills

Fines for stormwater violations range from \$250 to \$10,000.



 [Report Stormwater Pollution: wilmingtonnc.gov/reportstormwaterpollution](http://wilmingtonnc.gov/reportstormwaterpollution)

FILM



Iconic Bridge Undergoes Repair

Necessary structural repairs were completed in February on the one-way Harry Forden 6th Street Bridge. The rehabilitation of this historic structure involved sandblasting and repainting trusses, replacing wooden decking for pedestrians, and structural repairs to the steel and concrete platform. The iconic bridge is most famous for its frequent appearance in the TV show "One Tree Hill."

Productions underway so far in 2021 include:

- Hightown - television series (season 2)
- This Country - television series (season 1)
- Our Kind of People - television series
- Static - feature film
- I.S.S. - feature film
- Along For The Ride - feature film

MULTI-USE PATHS

Work to extend the Park Avenue Trail to Kerr Avenue will take place this year

Making Wilmington Safer for Cyclists and Pedestrians

Wilmington continues to expand its network of sidewalks and multi-use paths to provide more safe biking and walking opportunities. In addition to multiple transportation bond projects underway, the city is constructing the following trails:

- **Park Avenue Trail:** This trail will connect the existing trail from Audobon Boulevard to Kerr Avenue, where users can hop on an existing sidewalk to access a safe crossing at College Road.
- **Hooker Road Trail:** This multi-use path will run the full length of Hooker Road and will connect to UNCW and the Cross City Trail to the bike path on Wrightsville Avenue. ■

PUBLIC WIFI

City Provides Free Public WiFi Zones

In an effort to expand internet access to more Wilmington residents – a priority of the Wilmington City Council – the City of Wilmington has worked alongside New Hanover County, New Hanover County School System, and Live Oak Bank to provide free, outdoor WiFi zones throughout the city.



Where are the WiFi zones?

In addition to the sites provided by New Hanover County and New Hanover County School System, the city has three active sites at Maides Park, MLK Community Center, and Wilmington Police Department. The city worked closely with the New Hanover County School System to identify areas with the greatest need for extended wireless access.

How does it work?

Signs are posted at the three active sites identifying the WiFi zones and include network information. Anyone can use the WiFi as long as they are within reach of the WiFi signal, which extends about 300 feet.

Will there be more locations?

Yes! Staff is in the process of identifying other locations and assessing any infrastructure needs to support the WiFi zones. Future sites will include both indoor and outdoor locations. ■



COVID-19 RELIEF

City to Benefit from American Rescue Plan

The City of Wilmington is slated to receive \$25.9 million as part of the American Rescue Plan Act of 2021. City staff are developing options for deploying funds in line with Treasury Department guidance and council priorities, which will be presented to council. Potential funding areas include:

- 1) Economic Vitality
- 2) Community Vitality & Resilience
- 3) Critical Infrastructure Investments
- 4) Regional & State Partnerships
- 5) Council & Community Priorities
- 6) Replace Lost Revenue
- 7) Pandemic Response. ■

UPCOMING YOUTH SUMMER CAMPS

- Archery Camp at Maides Park
- Basketball Camps & Clinics at MLK Center
- Day Camps (full and half day)
- Nature Camps & Programs at Halyburton Park
- Olympics Camp at MLK Center Fields
- Sensory Camp at Fit For Fun Center
- T-Ball at Maides Park
- Tennis Clinics at Empie Park

Pre-registration is required for all camps. COVID-19 safety protocols will be in place. ■

i For more information and dates of camps, visit wilmingtonnc.gov/recreation



HOW RECYCLING WORKS

Supply: When you recycle, you start a chain reaction that turns your old products into something new. Follow along with the infographic below to learn how that happens. After you've placed your recyclables into your cart, City of Wilmington crews haul it to the Material Recovery Facility (MRF).



Fun Fact While you can recycle many things with the City of Wilmington, curbside bins are not able to accept plastic bags and film such as dry cleaning bags, produce bags, plastic wrap, and bubble wrap. These items may be recycled at several drop-off locations, including many grocery and retail stores. For a list of locations, visit plasticfilmrecycling.org.

Clear Run Branch Stormwater Project Underway

Anyone who has been around Clear Run Branch in the rainy season knows the area is prone to flooding.

The upper section of Clear Run Branch is highly eroded and impaired due to years of excessive stormwater runoff from upstream development. In addition, surrounding roads are poorly drained and

the road surface is in poor condition.

The Clear Run Branch Stormwater Improvement Project is the largest project that the City of Wilmington has undertaken to improve water quality, reduce chronic flooding, and enhance natural habitat.

Clear Run Branch is the upper reach of Bradley Creek, which is impacted by harmful levels of fecal coliform bacteria carried into the creek by stormwater

runoff. All water that flows into Bradley Creek eventually drains into the Intracoastal Waterway/Atlantic Ocean.

The first phase of the Clear Run Branch project will install pipes to convey stormwater under and along College Acres Drive and Mallard Street and add a sidewalk along College Acres Drive from Racine Drive to Oriole Drive. This phase includes major stream bank and floodplain restoration to increase flood

TURNING SOMETHING OLD INTO SOMETHING NEW

Demand: Manufacturers purchase the bailed recyclables and use them to create new products that are sold back to you. When you purchase products made of recycling, you are encouraging and creating a long-term market for recycled materials.



North Carolina is home to many recycled plastic processors or manufacturers that produce a wide variety of products including Strategic Materials which has three locations in the state and processes recycled glass. In Wilmington, Sonoco Recycling utilizes much of the paper and cardboard from the MRF for a variety of packaging products.

wilmingtonnc.gov/recycling

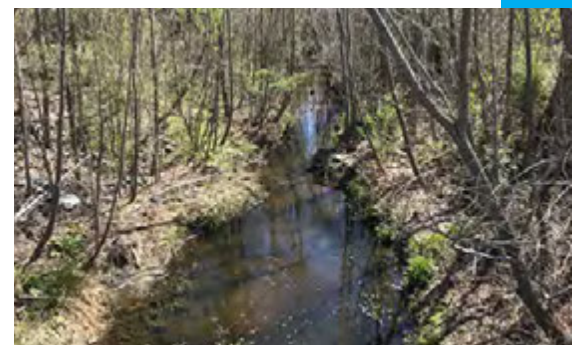
storage capacity and improve the natural habitat of Clear Run Branch. The project's construction phase is slated to begin later this year.

The next phase of the project will involve the installation of large pipes to capture and convey floodwaters from the commercial business areas along South College Road and New Centre Drive. This phase of the project also includes incorporating as much "green

infrastructure" as possible. Green infrastructure helps filter out pollutants like fecal coliform bacteria and reduces the amount of runoff flowing from impervious (hard) surfaces into Bradley Creek. ■

wilmingtonnc.gov/stormwaterprojects

Example of a stable streambank along Bradley Creek.



FROM THE MAYOR

Over the last year, it's been a genuine honor to see the community come together to support the Wilmington Tree Initiative like it has. Hundreds of people in the community have volunteered. Businesses have donated in excess of \$70,000 toward our goal. In less than a year, we've planted more than 3,000 trees and have given away more than 4,000. That's more than 7,000 new trees in our city that will help mitigate flooding, provide animal habitats, and add to our unique charm. None of this would be possible without the support from individuals, organizations, and local businesses who have rallied around our mission. While development and natural disasters have impacted our tree canopy, the work the Initiative is doing to replenish our urban forest cannot be overstated. We're proud of what we've been able to accomplish in such a short time, but there is more work to be done. Today, we celebrate. Tomorrow, we pick up our shovels.

Bill Saffo

Bill Saffo, Mayor



Mayor Saffo joins the tree planting at Williston Middle School on Arbor Day 2021

CLEAN ENERGY

Wilmington Embraces Clean Energy

EV Charging: The city currently has four sets of ChargePoint Level 2 Electric Vehicle (EV) chargers at the following locations:

- 1 set on the ground floor of the Market Street parking deck
- 1 set in the 2nd Street parking deck
- 2 sets in the River Place parking deck

The city received grant funding to purchase two EV fast charging stations, which will be installed within the next few months and will be located on the ground floor of the Market Street parking deck. The DC fast charging stations will establish quick-charge capability in an area where none currently exists.

Electric Refuse Truck Grant: The city received grant funding through the federal Diesel Emission Reduction Act



(DERA) program for the purchase a 100 percent electric refuse truck. The truck is expected to reduce CO2 emissions by 100 tons per year over the old diesel refuse truck it is replacing. ■

i [Learn more at wilmingtonnc.gov/sustainability](https://www.wilmingtonnc.gov/sustainability)

CITY EXCEEDS TREE PLANTING GOAL

Last year the City of Wilmington, in partnership with about a dozen other organizations, launched the Wilmington Tree Initiative with a goal of planting 1739 trees – an homage to the year Wilmington was founded – by Fall 2021. At this year's annual Arbor Day celebration, Mayor Bill Saffo announced the Initiative exceeded expectations by planting more than double the number of trees in about half the time.

While the work to grow the city's urban forest continues, the Initiative has:

- Planted 3,066 trees.
- Hosted three tree giveaways for a total of 4,615 trees given to the public.
- Received more than \$70,000 in corporate sponsorship and in-kind donations that go toward purchasing and planting the trees.
- Held more than 25 tree planting events. ■

i [Learn more about the initiative and its sponsors at www.wilmingtontrees.com](https://www.wilmingtontrees.com)



LAND DEVELOPMENT CODE

Proposed Development Code Based on Community Input

For the first time in four decades, the City of Wilmington is rewriting its Land Development Code (LDC), which will shape the city's future physical development. Built upon a multi-year foundation of grassroots engagement, this proposed code will help tomorrow's Wilmington reflect the community's preferences and hopes for the future.

The LDC includes four major components:

- 1) Zoning (the allowable uses and structures for a lot)
- 2) Subdivision of land
- 3) Standards for design and building requirements
- 4) Sign regulations

Over time, these work together to shape patterns of development and re-development which allows the city to address major long-term problems and realize a vision for the future.

The city began the process of rewriting its LDC eight years ago by asking residents to help city staff develop the Create Wilmington Comprehensive Plan. More than 4,000 residents participated in that opportunity,

expressing desires to improve traffic conditions, make the city more walkable and bike friendly, protect and grow the city's tree canopy, and preserve Wilmington's identity as a historic coastal community while also developing and elevating our parks, public spaces, and the services and recreational offerings available to the community.

The Create Wilmington Comprehensive Plan was honored in 2016 by professional planners as one of North Carolina's best comprehensive plans.* While this plan set forth a grand vision to create a future Wilmington in line with the public's desires and aspirations, the LDC puts that vision into action by crafting new development policies that will bring it to fruition.

The full draft of the proposed LDC is now available online at wilmingtonnc.gov/LDC. Public comments and questions are invited using the online feedback form or 910-341-0055. City Council is expected to conduct public hearings this summer with a vote to follow. If adopted, the regulations will likely go into effect January 2022. The public review process is now underway. ■



Wilmington's current LDC is based on development patterns and practices that were common in the 1980s. A great deal has changed since then including a significant increase in population. The proposed LDC is designed to meet the new challenges of growth to preserve and enhance the city's future quality of life.



Photos taken at the Create Wilmington Comprehensive Plan public engagement sessions (pre-pandemic).

*The Create Wilmington Comprehensive Plan earned the 2016 Marvin Collins Planning Award for Large Community/Comprehensive Planning, North Carolina Chapter of the American Planning Association

TURNING THE PAGE

Proposing A New Code for Today's New Challenges

The city's current Land Development Code is based on development patterns and building practices that were common in the 1980s. As an example, stand-alone commercial retail buildings with expansive parking fields were commonplace, such as the now-vacant K-Mart on College Road. Today Wilmington faces a different set of challenges than in the 80s, including the need to redevelop vacant and underutilized properties within the city. The new Land Development Code responds to these new and emerging needs with strategies to improve traffic conditions, preserve and grow the city's tree canopy, better manage stormwater,

and develop a more convenient, compact, and connected future city with a smarter approach to land use. This illustration demonstrates how the proposed code could guide the redevelopment of sites such as the vacant K-Mart on College Road.

- Reduce sprawl by encouraging the redevelopment of vacant or underutilized properties in the city. This helps to reduce long travel times on major roads and improves access and convenience for nearby neighborhoods.
- Locate residential housing closer to retail, restaurants, other services and offices. This lessens the need to drive major corridors, which relieves traffic congestion

and makes the community more convenient, walkable and bike friendly.

- Make tree replacement and tree preservation a priority to grow Wilmington's urban tree canopy.
- Encourage the on-site management of stormwater runoff and structured parking instead of expansive surface parking along major roads. This reduces the amount of runoff and flooding on surrounding roads and properties, and also enhances the appearance of major roads.
- Locate buildings closer to the street to create a sense of place and make the community more walkable and connected. ■



The now vacant K-Mart on College Road



**This illustration is for demonstration purposes only and does not show a currently planned development.*



SCAN ME

Creating a Sense of Place

“People judge a city by the appearance and function of its major streets,” explains Planning Director Glenn Harbeck. Looking toward future development that reinvests and reuses vacant and underutilized properties within the city, the new Land Development Code (LDC) aims to beautify and enhance the city’s major gateways and corridors, creating a stronger sense of place and convenience for residents. The below illustration demonstrates how the proposed code could influence a stretch of Carolina Beach Road over time. Future development would integrate residential, retail, and work spaces to increase convenience and reduce travel times. Placing storefronts rather than parking fields along the road and developing sidewalks, medians, and pedestrian crosswalks creates a more walkable and connected city. The proposed code also seeks to better integrate affordable housing options throughout the city. ■

**This illustration is for demonstration purposes only and does not show a currently planned development.*

- A** Parking is located behind rather than in front of buildings, creating more walkable and convenient storefronts.
- B** Large sidewalks make the city more walkable.
- C** Streets can integrate bicycle lanes connecting to the city’s network of multi-use trails and improving safety and traffic flow.
- D** Locating retail, work, and residential options together enables shorter trips and reduces traffic demand on major roads.
- E** Tree-lined streets, medians, and storefronts create a sense of place and elevate the appearance of the city’s major corridors.

- F** Affordable housing options are integrated within and throughout the community.
- G** An emphasis on tree preservation and tree replacement grows the city’s urban tree canopy.



i Learn more: wilmingtonnc.gov/LDC



STORMWATER POLLUTION: THE BIG PICTURE

What's Wrong With This Picture?

When rain washes over the city, the runoff is called stormwater. Stormwater pollution results from bacteria, litter, and chemicals washing into storm drains from hard surfaces, such as rooftops, pavement, parking lots, and driveways. Because it's not filtered before entering ground or surface waters, it's contaminated by everything it picks up along the way. This runoff goes untreated through storm drains and ditches to the nearest water body. The pollution threatens clean drinking water and harms wildlife and their habitats. It can be a public health problem and close swimming and shellfishing waters. The impact is costly and the most cost-effective way to manage stormwater pollution is prevention. ■



How many pollutants can you find in this picture? (Answers on pg 12)

Think about ways we can prevent the contamination of our waterways.

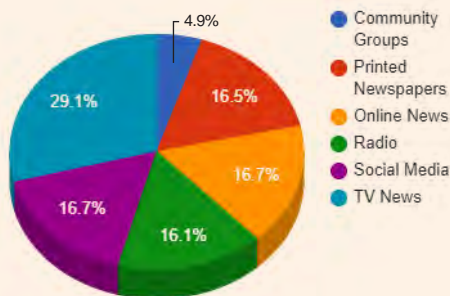
FALL SURVEY REVIEW

More than 500 residents participated in the Fall 2020 Resident Survey about how our community shares and receives news and information. These results will help the city improve its delivery of information about city services, programs, and projects.

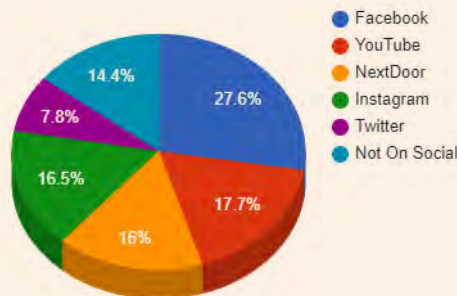
Here are the biggest takeaways from the survey:

- Television news is the most popular source of information for respondents.
- Direct email and telephone calls are the preferred forms of communication with city staff.
- Most people use the city website to look up contact information and general questions. The best way to improve the website is to make it more customer-service oriented.
- Facebook is the most commonly used social media site, followed by YouTube, Instagram, and NextDoor, respectively.

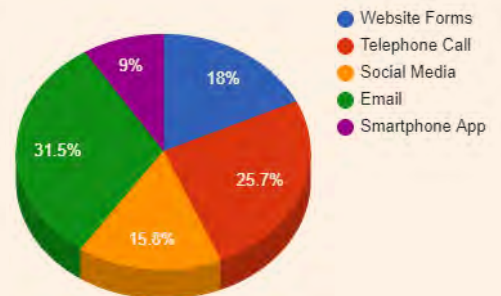
News Source Popularity



Social Media Sites Wilmington Residents Use Most



How People Want to Communicate with the City



SPRING 2021 RESIDENT SURVEY:

The proposed Land Development Code (see pages 7-9) would revise Wilmington’s development regulations to reflect the city’s long-term comprehensive plan. This comprehensive plan, which was adopted in 2016, built upon the grassroots input of more than 4000 community members to establish a shared vision for Wilmington’s future.

In the Spring 2021 Resident Survey, you have the opportunity to share your opinion on the priorities that are shaping this process. For each item below, please indicate whether you consider it very important, somewhat important, not that important, or not important at all to creating the kind of city you want to call home.

How important are these to you when planning for Wilmington’s future?	Very Important	Somewhat Important	Not That Important	Not Important at All	No Opinion
Develop new bike and pedestrian paths					
Improve traffic flow and reduce congestion					
Enhance the city’s parks and parks programming					
Promote job creation and economic development					
Enhance Wilmington’s Riverwalk					
Improve public transportation					
Upgrade the appearance of major streets and corridors					
Bury utility lines					
Bring more commerce and amenities to downtown					
Preserve and grow the city’s tree canopy					
Create new community gardens					
Enhance public education programming and opportunities					
Reduce large areas of concrete and asphalt					
Utilize more clean energy sources					
Encourage safer neighborhoods and community					
Preserve natural areas and open spaces					
Protect the residential atmosphere of neighborhoods					
Utilize traffic calming measures in neighborhoods					
Make grocery options more easily accessible					
Make retail options more convenient					
Improve drainage and stormwater management					
More entertainment options, activities and events					
Increase public access to water					

To return a completed survey and/or Kid’s Corner submission, use the postage paid reply envelope enclosed with the newsletter.

If you have completed the survey, your responses will be included with those from all other participants to provide valuable feedback to help inform and improve city decisions and operations. All survey responses are kept anonymous. If you are returning a Kid’s Corner submission, you are granting the city permission to publish the artwork along with the artist’s name and age. Thank you for your participation.

The mailing address for submissions is City Manager’s Office, PO Box 1810, Wilmington, NC 28402-1810. Submissions may also be scanned and emailed to newsletter@wilmingtonnc.gov.

 **Questions? Reach out to us by email at newsletter@wilmingtonnc.gov or phone at 910.341.7800**

KID'S CORNER

Wetland Wildlife

The ground sometimes acts like a natural “sponge” when it rains, forming the wetlands found along streams, lakes, ponds, and areas where fresh water meets the ocean. The combination of wet and dry areas means that lots of different plants, animals, and insects call wetlands home. A wetland also protects shorelines, keeps pollution out of waterways, prevents floods, and refills water stored underground.

We'd love to see your imagination at work! Create and draw a wetland animal, then describe the special features that make it able to live in that environment. ■

Artist's First Name and Age:

Animal's Name:

Describe your Animal:



Fun Fact

You can visit wetlands in Wilmington at J.E.L. Wade Park or Halyburton Park!

Answer Key for Stormwater Activity

Problems include the following: misapplied lawn pesticides; exposed sediment from garden; littering and litter from torn garbage bags; litter in the waterways; coolant, oil and vehicle residue leaking into storm drain; excess fertilizers applied to lawn by sprinkler; bacteria from pet waste.

RIVERFRONT PARK TO OPEN SUMMER 2021

The city's flagship Riverfront Park is on track to open to the public this summer. Located along the Cape Fear River near the Isabel Holmes Bridge, the park will include a large concert venue, festival space, playground, an interactive water feature, as well green space, plazas, gardens and natural areas. The park is partially funded by the 2016 Parks Bond. The completion of this signature urban park fulfills a long-standing goal to provide a sizable open space for people to enjoy downtown Wilmington. ■



Open this summer, the city is planning an opening celebration for Riverfront Park to be announced, and dates for live concerts and performances are already being released.

The Davis Center gymnasium at Maides Park officially opened in April.

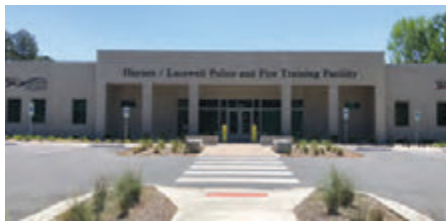


WPD

WPD Amps Up Community Outreach

Like everyone, the Wilmington Police Department had to adapt when the pandemic hit. Now that restrictions are beginning to ease, WPD is looking to increase its community engagement efforts. One way it will do that is through a multi-week Citizens Academy. Staff is in the process of coordinating the return of the annual program that went virtual last year. Classes will be held in person at the Haynes Laceywell Police and Fire Training Facility. The program will be interactive with live K9 demonstrations and participating in the Use of Force simulator. While a date for this year's academy has not yet been set, individuals are encouraged to visit www.wilmingtonnc.gov/police or WPD's social media accounts to learn more and to download the application. ■

Citizens Police Academy will be held at the Haynes/Laceywell Police and Fire Training Facility.



WFD

The Future of the Wilmington Fire Department

The Wilmington Fire Department is dedicated to evolving with the times to find new and innovative ways to protect, serve, and educate. With that in mind, the department is reorganizing its deployment model to better meet future demand for service. In the last decade, fire calls have declined due to improvements in construction codes and prevention



efforts. Despite this, today's firefighters stay quite busy. Calls for emergency medical assistance make up about half of WFD's call volume. Rather than send a firetruck to every call, the department is adding squad trucks or "quick response vehicles" to the fleet. These vehicles will be F350 crew cab trucks and will carry a number of tools and equipment like EMS supplies and tools for assisting in an extrication. These vehicles will take some of the wear and tear off the firetrucks and engines and allow them to be in place and ready for dispatch when a fire does come in. Even more importantly, the change will reduce the risk incurred by sending a larger vehicle and multiple personnel to less urgent calls.

The department hopes to have the new units in place before the end of the calendar year. ■

City Installs 1000-Gallon Cisterns at Fire Stations

The Heal Our Waterways program is partnering with the Fire Department to install cisterns at all fire stations within the Bradley Creek and Hewletts Creek Watersheds.

A cistern is a "stormwater solution" that is connected to a roof downspout to capture natural rainwater. This prevents rainwater from running off hard surfaces and washing pollutants like bacteria into local creeks. The

resulting washwater is collected, treated, and cleaned, preventing it from impacting the creeks.

Three 1000-gallon cisterns have been installed and another is slated for installation this summer. ■



[Learn more at healourwaterways.org](http://healourwaterways.org)

CONTACT

Wilmington City Council

Bill Saffo, Mayor
Margaret E. Haynes, Mayor Pro-Tem
Charles H. Rivenbark, Jr.
Kevin O'Grady
Neil Anderson
Clifford D. Barnett, Sr.
Kevin Spears

General Information Phone Numbers

City Information..... 910.341.7800
Cape Fear Public Utility Authority..... 910.332.6550
Code Enforcement..... 910.341.3266
Fire Non-emergency..... 910.341.7846
Parking..... 910.762.5678
Parks and Recreation..... 910.341.7855

Police Non-emergency..... 910.341.3600
Street Maintenance..... 910.341.7879
Stormwater..... 910.341.4646
Trash and Recycling..... 910.341.7875
Zoning..... 910.254.0900

City Council Meetings

City Council meetings are generally held on the first and third Tuesday of the month at 6:30 p.m. at the Wilmington Convention Center until further notice. Council meetings are replayed Wednesday, Thursday, and Friday the week of the meeting at 10 a.m. and 8 p.m. Meetings are available for remote viewing via:

- GTV8 (Spectrum channel 8)
- wilmingtonnc.gov/gtv
- [youtube.com/user/cityofwilmington](https://www.youtube.com/user/cityofwilmington)

Stay Informed

Stay up-to-date with what's happening in the city by following us on social media.

- [f @cityofwilmington](https://www.facebook.com/cityofwilmington)
- [@cityofwilm](https://twitter.com/cityofwilm)
- [@cityofwilm](https://www.instagram.com/cityofwilm)
- [cityofwilmington](https://www.youtube.com/c/cityofwilmington)



THE STATE OF WILMINGTON'S WATERWAYS

2020 UNCW SURFACE WATER QUALITY REPORT

(Following is a summary of the condition of major creeks and waterways, not drinking water, within the City limits.)

The State of Wilmington's Waterways 2020 UNCW Surface Water Quality Report is a summary of the current health and condition of the major creeks and waterbodies that fall within Wilmington's city limits. UNCW water quality sampling information was provided by Dr. Michael Mallin of the UNCW Center for Marine Science and lead scientist for the Wilmington Watersheds Project. The water quality sampling summary is based on data collected between the months of January-December 2020 and is presented from a watershed perspective, regardless of political boundaries.

The summary describes each watershed by size, state classification, state status, reason for impairment, and UNCW sampling summary. For more information on the current health of Wilmington's waterways or to read Dr. Mallin's entire report, please visit:

<http://uncw.edu/cms/aelab/research.html>

Water Definitions

Algal Bloom Rapidly occurring growth and accumulation of algae in a waterway resulting from excess nutrients that can lead to low dissolved oxygen levels and fish kills. (Sources: fertilizers, grass clippings, pet waste)

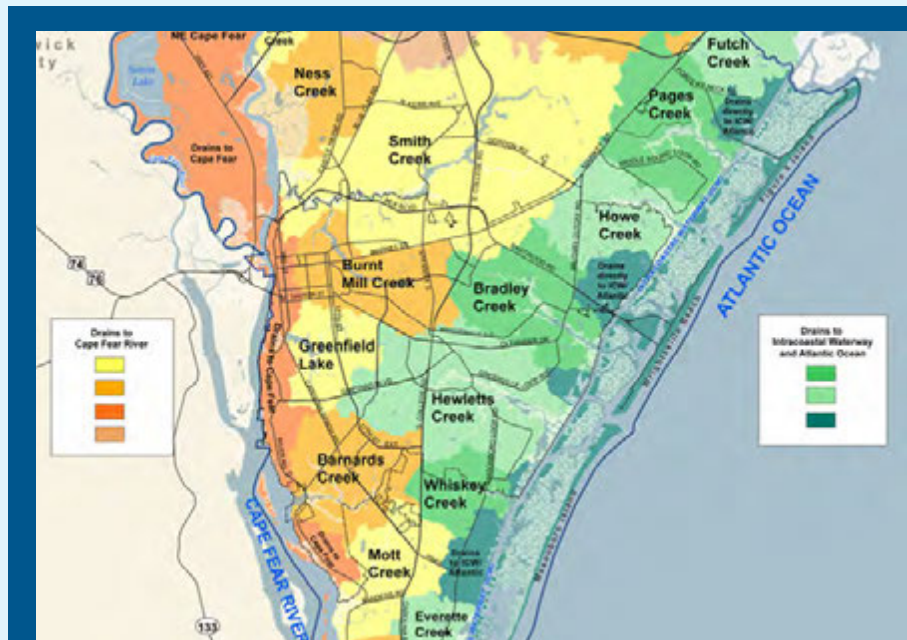
Biological Integrity The ability of an ecosystem to support and maintain a balanced and indigenous community of organisms.

Best Management Practice (BMP) An action or landscape modification that reduces the amount of pollution and/or the quantity of stormwater flowing into waterways. BMPs can be actions, such as picking up after your pet, or on-the-ground practices, such as rain barrels and rain gardens.

Chlorophyll a Allows plants to photosynthesize and gives plants their green color. Waters that have high chlorophyll a levels are typically high in nutrients (phosphorus and nitrogen), which cause algae to grow or bloom. When algae die, it depletes oxygen from the water and can cause fish kills.

Dissolved Oxygen (DO) The amount of oxygen available in water. Fish and aquatic organisms require adequate levels of DO to survive.

Fecal Coliform Bacteria Bacteria present in the intestines and feces of warm-blooded animals. High counts of fecal coliform bacteria in a waterway indicate the presence of other



UNCW Results Summary: Some shifts in water quality sampling were initiated in 2020. Some sites that had been sampled for years (Howe, Whiskey, Motts and Barnards) were shifted to focus on upper Bradley Creek. The Clear Run Branch section of Bradley Creek is slated for stream rehabilitation and more data was needed on pollutants in the creek. Rainfall causes especially high fecal bacteria counts in this area, which collects drainage from across South College Rd.

Overall, high fecal coliform bacteria counts continue to impact Bradley Creek, Burnt Mill Creek, Hewletts Creek and much of the Greenfield Lake system. Blue-green algal blooms continue to impact Greenfield Lake and cause problems for dissolved oxygen in the lake.

Water quality sampling is now occurring monthly at Greenfield Lake, as UNCW continues to partner on an EPA grant project to reduce nutrients and algal blooms in the lake by modifying the Willard Street pond/wetland.

disease-causing pathogens which can cause sickness and disease in humans and animals. (Sources: pet/animal waste, sewer overflows, septic system failure)

Hypoxia Low dissolved oxygen levels in a waterway which can result in fish kills.

Nutrients Substances (i.e. nitrogen and phosphorous) needed by plants and animals for growth; however, excessive nutrients in a waterway can lead to harmful aquatic weed and algae growth, low DO levels and fish kills. (Sources: fertilizers, yard waste, pet waste)

Pathogens Disease-causing organisms such as bacteria and viruses. (Sources: pet waste)

PAHs (Polycyclic Aromatic Hydrocarbons) Toxic by-products of petroleum and fossil fuels, which can be harmful to humans and aquatic life and can persist in the environment for a long time. (Sources: auto exhaust, motor oil, parking lot sealcoats, roofing tars, coal power plants)

Sediment Particles of silt, clay, dirt, or sand that

wash into waterways caused by land-disturbing activities or natural weathering. Sediment can settle to the bottom or remain suspended in water. (Sources: construction sites with failing/erosion control, eroding streambanks, and exposed soil)

Tidal Creek A saltwater creek that is influenced by tides. Many tidal creeks have oyster reefs along their shorelines.

Turbidity A cloudy condition in water caused by suspended sediment.

Watershed An area of land that drains into a specific body of water such as a creek, lake, or river.

Water Classifications

The NC Division of Water Resources applies classifications to waterways which define the best uses to be protected within those waters (i.e. swimming, fishing, drinking water supply, aquatic life). These classifications have

an associated set of water quality standards to protect their designated uses. These standards may be designed to protect water quality, fish and wildlife, the free flowing nature of a stream, or other special characteristics. In addition, there may be a **supplemental classification** applied to protect several different uses or special characteristics within the same waterbody. Listed below are the freshwater and saltwater classifications that apply to Wilmington's waterways. For more information, visit: <https://deq.nc.gov/about/divisions/water-resources/planning/classification-standards/classifications>

Freshwater Classifications

Class C Waters protected for secondary recreation (fishing, boating and other activities involving minimal and infrequent skin contact), wildlife, agriculture, biological integrity, and fish/aquatic life propagation and survival.

Supplemental Classification

Swamp Waters (Sw) Waters that naturally have low flow and other characteristics which differ from creeks draining land with steeper topography.

Saltwater Classifications

Class SC Saltwaters protected for secondary recreation (such as fishing, boating, and other activities involving minimal skin contact), fish and noncommercial shellfish consumption, fish/aquatic life propagation and survival, and wildlife.

Class SB Saltwaters used for primary recreation such as swimming, and all Class SC uses.

Class SA Saltwaters used for commercial shellfishing and all Class SC/SB uses. SA waters are also High Quality Waters (HQP) by supplemental classification.

Supplemental Classifications

High Quality Waters (HQP) Waters rated excellent based on biological, physical, and chemical characteristics and having primary or functional nursery areas.

Outstanding Resource Waters (ORW)

Unique and special waters having excellent water quality and being of exceptional state or national ecological or recreational significance.

State Status/Reason

Indicates whether or not a creek is supporting its State classification/use and the reason why.

NC 303(d) List of Impaired Waters

Section 303(d) of the Clean Water Act requires states to develop and frequently update a list of waters that do not meet water quality standards or have impaired uses. This newsletter is based on the NC 303(d) List, which is available for viewing at: <https://deq.nc.gov/about/divisions/water-resources/planning/modeling-assessment/water-quality-data-assessment/integrated-report-files>.

Unfortunately, several of Wilmington's waterways are on the 303(d) list because of pollution, such as bacteria and nutrients, which is washed from the land by stormwater runoff.



Cape Fear River

Watersheds that drain to the Cape Fear River (CFR)

Smith Creek

Size of watershed: 16,650 acres

State classification/Use: C, Sw

State Status: Currently supporting use

Reason: Meets standards for Class C waters

UNCW Sampling Summary: Dissolved oxygen levels were low on one of eleven sampling occasions. Turbidity was good and there were no issues with algal blooms. Fecal coliform bacteria was high on one sampling occasion.

Burnt Mill Creek

Size of watershed: 4,207 acres

State classification/Use: C, Sw

State Status: Impaired. On NC 303(d) List

Reason: Does not meet standards for Class C waters, specifically for biological integrity for benthos (bottom dwelling organisms)

UNCW Sampling Summary: Water quality was poor with elevated fecal coliform counts and had some incidents of low dissolved oxygen. Algal blooms were not a problem in 2020.

Greenfield Lake

Size of watershed: 2,465 acres

State classification/Use: C, Sw

State Status: Impaired. On NC 303(d) List

Reason: Does not meet standards for Class C waters, specifically for Chlorophyll a

UNCW Sampling Summary: The tributary streams that flow into Greenfield Lake experienced high fecal coliform bacterial counts and low dissolved oxygen. The main lake had good dissolved oxygen and low turbidity but had high fecal coliform counts at some sampling stations. The lake suffered from blue-green algal blooms and high biochemical oxygen demand (BOD) in summer and early fall.

Barnards Creek

Size of watershed: 4,173 acres

State classification/Use: C, Sw

State Status: Currently supporting use

Reason: Meets standards for Class C waters

UNCW Sampling Summary: Not sampled in 2020.

Mott Creek

Size of watershed: 3,342 acres

State classification/Use: C, Sw

State Status: Currently supporting use

Reason: Meets standards for Class C waters

UNCW Sampling Summary: Not sampled in 2020.



Intracoastal Waterway

Watersheds that drain to the Intracoastal Waterway (ICW)

Howe Creek

Size of watershed: 3,516 acres

State classification/Use: SA, ORW

State Status: Impaired. On NC 303(d) List; closed to shellfishing

Reason: Does not meet standards for Class SA waters, specifically for fecal coliform bacteria; a portion of Howe Creek is also impaired for dissolved oxygen

UNCW Sampling Summary: Not sampled in 2020.

Bradley Creek

Size of watershed: 4,583 acres

State classification/Use: SC, HQW

State Status: Currently supporting use

Reason: Meets standards for Class SC waters

UNCW Sampling Summary: In 2020, a stronger focus was placed on sampling upper Bradley Creek, known as Clear Run Branch. Sampling sites at College Acres and Racine Drive had low dissolved oxygen, elevated turbidity, and very high fecal coliform bacteria counts, especially after rain events. High fecal coliform counts were also found downstream in the creek.

Hewletts Creek

Size of watershed: 7,478 acres

State classification/Use: SA, HQW

State Status: Impaired. On NC 303(d) List; closed to shellfishing

Reason: Does not meet standards for Class SA waters, specifically for fecal coliform bacteria

UNCW Sampling Summary: Hewletts Creek did not have algal bloom, turbidity, or dissolved oxygen problems. However, all 5 sampling stations had excessive fecal coliform bacterial problems.

Whiskey Creek

Size of watershed: 2,078 acres

State classification/Use: SA, HQW

State Status: Impaired. On NC 303(d) List; closed to shellfishing

Reason: Fecal coliform bacteria

UNCW Sampling Summary: Not sampled in 2020.

**All waters in the State of North Carolina are impaired for mercury, based on high levels found in the tissues of several fish species.*



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City Manager Set to Retire After 45 Years in Public Service

City Manager Sterling Cheatham, who led Wilmington for nearly two decades to become one of the top cities on the east coast, will retire effective June 1, 2021.



“As I look to begin a new chapter in my life, words cannot express my sincere feelings for the wonderful journey we have traveled together,” Cheatham wrote in a letter to staff announcing his decision.

Cheatham’s career in public service spans 45 years. A native of North Carolina, he joined the City of Wilmington in 2002 after serving in various administrative roles in South Carolina, Maryland, and Virginia. During his 18-year tenure with the City of Wilmington, Cheatham led the revitalization of Downtown, the development of the Convention Center, and modernized the city’s infrastructure. He saw the city through natural disasters and an economic recession. His financial stewardship allowed the city to maintain core services and a healthy fund balance and bond rating.

“On a personal note, Sterling is not only one of the finest public servants, but also one of the finest people I have ever known,” Mayor Bill Saffo said. “I consider it my great honor and privilege to have worked alongside him my entire time as mayor.”

Deputy City Manager Tony Caudle has been named Interim City Manager, which will take effect June 1.

